EPITOME
OF
DISEASES OF THE SKIN

By the same Author.

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EPITOME OF DISEASES OF THE SKIN.

BEING AN ABSTRACT OF A COURSE OF LECTURES

DELIVERED IN THE UNIVERSITY OF PENNSYLVANIA
DURING THE SESSION OF 1883 AND 1884.

BY

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PREFACE.

THE Lectures (sixteen in number) were given before the graduating class of the University of Pennsylvania. They were prepared with the view of presenting the subject in as simple, concise, and practical a form as possible. They were reported in abstract form by Dr. Henry Wile for THE MEDICAL NEWS, in which periodical they have appeared. With the hope that they might be of aid to students and others desiring a succinct account of these diseases, they have been gathered together, revised, and republished in the present shape. It need scarcely be stated that this little volume can in no degree take the place of the more complete works on diseases of the skin. Let it be regarded rather as an epitome of the subject.

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CONTENTS.

EPITOME

OF

DISEASES OF THE SKIN.

CLASSIFICATION.

SCIENCE is classified knowledge, and the development of any science depends upon improved methods of classification. In dermatology this subject is important from a scientific and from a practical standpoint. History shows that various methods of classification, from the most simple to the most complicated, have been proposed from time to time. Two of them may be alluded to. About the beginning of this century Willan grouped the affections of the skin according to the elementary lesions, as, for example, macules, vesicles, papules, pustules, etc. The arrangement was useful at the time, and was attractive and simple. It was, however, insufficiently comprehensive, embracing by no means all diseases, and if followed out led to confusion.

The classifications in vogue to-day have as a basis that put forth by Hebra and Rokitansky, about forty years ago, and are based upon the anatomy of the skin, the pathology of the lesions, and, to a slight extent,

upon their etiology. The following classification, which will be here used, embraces nine classes.

I. ANOMALIES OF SECRETION (sebaceous glands, sweat-glands); *e. g.*, seborrhœa, hyperidrosis.
II. HYPERÆMIAS; *e. g.*, simple erythema.
III. INFLAMMATIONS; *e. g.*, eczema, psoriasis, acne.
IV. HEMORRHAGES; *e. g.*, purpura.
V. HYPERTROPHIES; *e. g.*, chloasma, ichthyosis.
VI. ATROPHIES; *e. g.*, vitiligo.
VII. NEW GROWTHS; *e. g.*, cancer, lupus, syphilis.
VIII. NEUROSES; *e. g.*, pruritus.
IX. PARASITES; vegetable, *e. g.*, tineæ; animal, *e. g.*, scabies.

CLASS I.

ANOMALIES OF SECRETION.

SEBORRHŒA.

Seborrhœa may be defined to be a disease of the sebaceous glands, characterized by an excessive and abnormal secretion of sebaceous matter, forming upon the skin an oily coating, crusts, or scales. Two varieties are recognized, namely, *seborrhœa oleosa* and *seborrhœa sicca*, which may exist separately or together. Seborrhœa oleosa occurs chiefly on the face, especially on the nose and forehead. In its milder form it is not an uncommon affection.

Seborrhœa sicca, or dry seborrhœa, occurs upon the chest and back, but most frequently upon the scalp, where

in its usual form it gives rise to what is ordinarily known as dandruff. It consists in the formation of scales, loose or adherent, and when the process continues on the scalp the hairs become dry, fall out, and baldness ensues. Many cases of premature baldness arise from neglected seborrhœa. The same form may attack the hairy portions of the face. On the back and chest the lesions consist of dime or quarter-dollar sized, rounded or circinate spots, covered with dry or greasy scales, with a patulous condition of the ducts of the sebaceous glands. The genital region also may be affected.

Seborrhœa sicca occurs most frequently in light-haired, pale, anæmic subjects, while seborrhœa oleosa is found more in dark-haired subjects. Both forms are met with mostly in adolescence, and they are usually associated with general debility. The secretion seems to be largely under the control of the nervous system, and the pathology of the process is that of a functional derangement of the sebaceous glands with a tendency to subsequent atrophy of the glands. Microscopic examination of the secretion shows degenerated granular epithelial cells mixed with amorphous, oily, molecular débris.

When existing on the scalp the disease must be differentiated from eczema, psoriasis, and ringworm. Want of infiltration of the deeper layers of the skin, dryness, and excessive scaling are sufficient to distinguish it from the first; its diffusion over large areas, want of sharp definition at the borders, grayish or yellowish scales, on a pale or slightly hyperæmic base, would dispel all doubts as to the second, while a microscopic examination of some of the scales would render it impossible to con-

found it with the third. On the chest it may also be mistaken for ringworm, but here the microscope would again decide. On the face it may be confounded with lupus erythematosus, but in pronounced cases of the latter there is usually sharp definition of the lesions accompanied by marked infiltration and thickening, also later, by the formation of atrophic scar-tissue, all of which are absent in seborrhœa.

The treatment is important; it is sometimes an easy matter, at others one of some difficulty. A general constitutional treatment is often useful, the same consisting of out-door exercise, hygiene, regulation of diet, and the administration of cod-liver oil, iron, and arsenic. The latter may be given in the following eligible form:

℞.—Liq. potassii arsenitis, . . . f℥j.
Vini ferri, ... f℥iv.

S.—One teaspoonful three times a day, to be taken in a wineglassful of water after meals.

The sulphide of calcium in doses of one-tenth to one-half grain, continued for weeks or months, may also be mentioned, the same exerting a tonic effect upon the sebaceous glands. Local treatment is, however, the most valuable. In seborrhœa of the scalp, when occurring in the female, it is never necessary to cut the hair. The scales must first be removed, and this may be effected by the use of water with a solution containing two parts of soft soap and one part of alcohol. Where the scales are adherent, olive oil may be employed, thoroughly saturating the part, and allowing it, covered with a thick flannel cap, to remain over night; in the morning the scales may readily be washed off

with soap and hot water. After the parts are cleansed, ointments may be applied, and among the best are those of sulphur and mercury. An ointment of sublimed or precipitated sulphur, one to three drachms to the ounce of lard or vaseline, may be mentioned as one of the most useful. There may be cases in which it is ineffectual, then an ointment of white precipitate, fifteen to forty grains to the ounce of vaseline, may be used with advantage; or the red oxide of mercury, five to twenty grains to the ounce. Tarry preparations, such as oil of cade, pure or in the strength of two drachms to the ounce of alcohol, are often of service. Tar ointment is also valuable. The following may be used later in the treatment:

℞.—Ol. ricini, ... ʒij.
Acidi carbolici, ... ♏xl.
Alcoholis, q. s. ad. . . . . ʒiv.

Sig.—Apply daily.

It is often surprising to see how much stronger remedial applications the scalp will stand than the other parts of the body.

In seborrhœa of the face and body, mercurial and sulphur ointments are the most useful. Their conjoint use should be avoided. The following lotion of sulphide of zinc may be used with excellent result.

℞.—Zinci sulphatis,
Potassii sulphureti, ... āā ʒj.
Alcoholis, ... ʒiij.
Aquæ rosæ, q. s. ad. . . . . ʒiv.

Sig.—Apply, fifteen minutes at a time, with a soft sponge. Shake before using.

In this combination a chemical decomposition occurs, in which a grayish precipitate of sulphide of zinc is thrown down.

Another valuable lotion is that known as Vleminckx's solution, the formula of which is as follows:

℞.—Sulphuris sublimati, ... ℥i.
Calcis, ... ℥ss.
Aquæ, ... f℥x.
Coque ad f℥vj, filtra, adde ol. anisi q. s.

This should be used diluted, one part in four to twelve of water.

COMEDO.

Comedo is a disorder of the sebaceous glands characterized by yellowish or whitish pin-point and pin-head sized elevations, containing in their centre exposed blackish points. The affection is known in popular language as "grubs," "grub worms," and "blackheads." It is found mostly on the face, back of neck, chest, and back. The lesions are usually numerous, often associated with acne and sebaceous tumors, and run a chronic, sluggish course. It occurs generally in young persons between the ages of fifteen and twenty-five years, and is often dependent upon general debility, constipation, dyspepsia, and chlorosis. The skin is improperly nourished, and acquires a thick, muddy complexion. The process is confined to the sebaceous glands and ducts, consisting of a distention of the follicles with sebaceous matter. Sometimes the comedo contains a small curled-up hair, sometimes a parasite known as *demodex folliculorum*, which, however, is harmless and in no way the cause of the disease.

The treatment should be both internal and local. Internally, tonics of iron and arsenic, and saline aperients, may be administered; and locally, hot baths, with soap and friction. The comedones should be expressed by means of a watch-key, or, where they are very numerous, a curette may be employed with advantage. Stimulating ointments and lotions should be used, especially those containing sulphur.

℞.—Sulphuris sublimati, ... ℥iij.
Adipis benz., ... ℥ij.
Petrolati, ... ℥iij.

Sig. Apply at night.

Vleminckx's solution,—one part in three to six of water, or a lotion containing equal parts of sulphur, glycerine, carbonate of potash, ether, and alcohol may also be applied with good results. Attention must also be directed to regulation of any functional disturbance of the stomach or bowels that may exist.

MILIUM.

Milium consists in the formation of small, roundish, whitish, sebaceous, non-inflammatory elevations, situated in the skin beneath the epidermis. They are whitish or pearl-colored, rounded or acuminate; are found for the most part on the face, eyelids, and foreheads of elderly persons, and may exist in such numbers as to be disfiguring. The lesions may undergo calcification, giving rise to *cutaneous calculi*, the product being chiefly phosphate of lime. The causes of the disease are the same as those which produce comedo and cyst. Examination shows the lesions to have no apertures on the surface,

and to consist of accumulations of sebaceous matter within the glands. In the matter of treatment, electrolysis with a fine needle, or incision and the application of tincture of iodine or of nitrate of silver, may be resorted to.

SEBACEOUS CYST.

Sebaceous cyst, or wen, appears as a variously sized, firm or soft, rounded, more or less prominent tumor, having its seat in the skin, or subcutaneous connective tissue. It is found especially on the scalp, face, back, and scrotum. There are two kinds, one with open, the other with closed duct. The course of the development is slow. In diagnosis they must be differentiated from fatty tumors, and from molluscum epitheliale. The treatment should be radical, and consist in a removal by dissection of the cyst with its wall. Hypodermic injections of tincture of iodine may also be mentioned as useful.

HYPERIDROSIS.

Hyperidrosis is a functional disease of the sweat-glands, consisting in an increased flow of sweat. It may be universal or local, limited or excessive, unilateral or bilateral. It is generally met with on the palms of the hands and soles of the feet. The secretion may be so excessive that it drops from the hands, thus incapacitating an affected individual from engaging in any pursuit. The secretion is not accompanied by any odor.

BROMIDROSIS.

Bromidrosis, also a functional disease of the sweat-glands, is characterized by more or less sweating, and

a heavy or an offensive odor. This may be universal or local, generally the latter, and usually affects the axillæ, genitalia, hands, and feet. The odor may be heavy or stinking, or be likened to that of a goat or to urine; odors, as of violets or fruits, as pineapples, are also rarely thrown off from the body. Bromidrosis when highly developed is a disgusting affection; the individual becomes a burden to himself or herself, may be kept out of employment, and naturally inclines to shun all society.

CHROMIDROSIS.

Chromidrosis is an affection in which the sweat is variously colored, being bluish, blackish, reddish, greenish, or yellowish. Prussian blue, indigo, and copper have been found in the secretion. In *hæmatidrosis*, blood corpuscles are found in the sweat, and in *uridrosis* the sweat contains urea. *Phosphorescent* sweat is occasionally met with. Here the body becomes luminous in the dark. It occurs sometimes in individuals who have partaken of putrid fish, also in the late stages of phthisis.

In the treatment of diseases of the sweat apparatus, more especially hyperidrosis, tonics of iron, quinine, arsenic, and the mineral acids should be exhibited, also belladonna, atropia, and ergot. Locally, lotions may be employed, and among the best are those of tannic acid and salicylic acid in the strength of one drachm in four to eight ounces of alcohol. Tincture of belladonna, full strength or diluted, is also valuable. Boracic acid, sulphate of zinc, alum, and chloral may also be referred to as useful. The application of the lotion may be followed by some dusting powder, as starch, lyco-

podium, oxide of zinc, alum,—one-half drachm or more of the latter to the ounce. Dusting powders containing boric and salicylic acids must be mentioned as being serviceable.

One of the best modes of treatment is that by diachylon plaster and olive oil, equal parts, spread on linen cloths in form of plaster, and wrapped around the affected parts, the dressing being changed twice in the twenty-four hours. In the treatment of bromidrosis the same general rules apply. In this affection, the oleate of mercury, ten or fifteen per cent. strength, may be added to the list.

CLASS II.

HYPERÆMIAS.

There are many diseases of the skin which commence with hyperæmia, but pass so quickly into inflammation that they are not classed under hyperæmia. Thus, in this class are embraced but two diseases, erythema simplex and erythema intertrigo.

ERYTHEMA SIMPLEX.

Erythema simplex is usually local, and occurs in the form of spots and patches variously sized and shaped. It is met with chiefly in infants, and may be occasioned by some disturbance of digestion. The lesions usually last only a few hours, but may continue several days. Other forms of this disease are caused by exposure to the sun, traumatism, local irritants, and poisons.

ERYTHEMA INTERTRIGO.

Erythema intertrigo is a hyperæmic disease, characterized by redness, heat, and an abraded surface, with maceration of the epidermis. It is commonly known as "chafing," and is caused by friction between two folds of skin, occurring especially in the axillæ, groins, beneath the mammæ, and between the nates. It is usually sudden in its advent, and is found for the most part on infants and on corpulent persons during hot weather. The disease is not always a passing disorder, but may persist, sometimes for months.

Erythema intertrigo is the only form of hyperæmia calling for treatment, and it may consist in the use of dusting powders, such as starch, Venetian talc (silicate of magnesia), or alkaline lotions, as of borax or castile soap, followed by some dusting powder. If it does not yield to such simple measures, black wash, lotions of tannic acid, boric acid, or sulphate of zinc may be employed. If it still persists, then certain other remedies, to be mentioned under the treatment of erythematous eczema, may be used.

CLASS III.

INFLAMMATIONS.

ERYTHEMA MULTIFORME.

Erythema multiforme is an acute inflammatory disease, characterized by reddish, more or less variegated macules, papules, and tubercles, discrete or in patches. It occurs in various forms. The commonest is the pap-

ular manifestation, *erythema papulosum*. Sometimes the lesions are in the form of a ring, *erythema annulare*; sometimes in the form of variously colored concentric rings, *erythema iris*. At times the patches assume gyrate forms with irregular margins, *erythema marginatum*. The disease is acute, and, as a rule, of short duration, running its course in two or three weeks, sometimes being accompanied by febrile disturbance. It is inclined to show itself in crops, and it is a peculiarity of this disease to appear as a rule first upon the backs of the hands. Generally it is confined to this region. The subjective symptoms are insignificant, considering the apparently violent nature of the inflammation. It is most frequently met with in spring and autumn, and relapses are known to occur. Comparatively little is known of its pathology. The histology of the lesions reveals nothing beyond the ordinary inflammatory changes. Authorities regard it as the result of vaso-motor disturbance. In the diagnosis it must be distinguished from herpes iris, urticaria, eczema papulosum, and erythema nodosum. Little is to be said about the treatment, as the disease usually passes off in a week or two. Active local treatment is to be avoided, as it may aggravate the symptoms.

ERYTHEMA NODOSUM.

Erythema nodosum is an acute inflammatory disease, characterized by the formation of rounded, ovalish, variously sized, more or less elevated, reddish nodes. There is usually some prodromic febrile disturbance, and before the eruption appears, it is difficult to make the diagnosis. The eruption makes its appearance suddenly, having preference for the forearms and legs, especially over the tibiæ, and the site of the lesions

is usually the seat of a burning or rheumatic pain. The lesions vary in size from a chestnut to an egg, are rounded or ovoidal, present a variegation in color, and attain their height usually between the fourth and sixth day, when they are tense and look shining. They are firm and painful on pressure, so that when over the tibiæ the patient may be unable to walk. The disease may also attack the mucous membrane of the mouth, tongue, and gums.

It usually occurs in weakly or debilitated subjects, is preceded and accompanied by languor, malaise, and rheumatic pains, and is of most frequent occurrence in females, in childhood and in adolescence. It is closely allied to erythema multiforme, some authorities even considering it as an advanced stage of this disease. The lymphatics are often involved, and the exudation is either plastic, serous, or hemorrhagic. The lesions may be mistaken for contusions; the similarity has even led to the name *dermatitis contusiformis*. It may be further confounded with a bruise, erysipelas, and threatening abscess.

The lesions are more deeply seated and more nodular than in erythema multiforme. As the disease ends in spontaneous recovery, little or no treatment is indicated. When the febrile symptoms are marked, quinine, aconite, laxatives, and salines may be employed. Rest is important, and locally, hot water applications may be made. The duration of the disease is from two to three weeks. Relapses are not common.

URTICARIA.

Urticaria, known popularly as *nettle-rash* and *hives*, is an inflammatory disease characterized by the forma-

tion of wheals of a whitish, pinkish or reddish color, accompanied by stinging, tingling or pricking sensations. Its advent is usually sudden, and the lesions are variable as to size, shape, and color. They may be circumscribed or diffuse, often showing a tendency to coalesce, forming patches of a rounded, ovalish, or elongate or gyrate shape. They are soft or firm, and may rise considerably above the surface. On an individual affected with urticaria, the eruption may be evoked by passing the finger-nail over the skin.

The disease is generally ephemeral, lasting but a few hours or a day, and individual lesions are capricious and fugitive. Every part of the integument is liable to be attacked, and it is apt to go from one region to another. It may even appear on the mucous membrane of the mouth and pharynx to the exclusion of the rest of the body, and may occur at all periods of life, children being particularly liable to it. It is an acute disorder, but may be chronic by relapses.

Urticaria papulosa is a form of the disease met with among poorly cared for infants and children. It is common in London, but rare in Philadelphia. The lesions are in the form of small papules, are very persistent, and are especially annoying at night. Urticaria may also occur with other diseases: *e. g.*, purpura, constituting *purpura urticans*. It may assume a bullous form, *urticaria bullosa;* or a large nodular type, *urticaria tuberosa*, or giant urticaria, the lesions having an elevation of a half inch or an inch, and being found most frequently about the head.

Acute Urticaria.—The advent is sudden and is preceded often by slight febrile symptoms, languor, malaise, gastric derangement, or constipation. In a few hours

the whole surface of the body may be covered with wheals. The duration is variable, and relapses may or may not occur.

Chronic Urticaria.—The lesions are the same, though less acute than in the former variety, and the disorder may last for months or years, successive crops appearing daily or at intervals. The wheals may be ephemeral or persistent. The general symptoms are usually wanting.

The causes of urticaria are numerous and varied. Among external irritants may be mentioned: stinging nettle, caterpillars, jelly-fish, etc. Among internal causes: gastric and intestinal derangement, fish, shell-fish, certain fruits, chloral, salicylic acid, iodide of potassium, intestinal worms, menstrual and other uterine disorders, organic diseases of internal organs, spinal irritation, neuralgia, asthma, and albuminuria. The pathology of the lesions consists in an acute inflammatory process in the papillary layer, with œdema of the skin. The circulation is interfered with, the blood in the wheal being driven from the centre to the periphery. The process is largely under the control of the nervous system. In some cases no cause can be detected.

The diagnosis is easy. It must be differentiated from erythema papulosum, erythema tuberculosum, and erysipelas. In regard to treatment, it is always important to investigate the cause, and when found to be a disorder of the alimentary canal, emetics, salines, and the repeated use of aperients should be ordered. Diet should be regulated, and some alkali administered; *e.g.*, liquor potassæ. When gouty symptoms are present, alkalies and colchicum are indicated. Other remedies which may be found useful are quinine, pilocarpine,

atropia, sulphite and hyposulphite of sodium, bromide of potassium, and chloral. Change of climate may also at times be useful.

Local treatment is of importance with a view to immediate relief. This may consist of baths or lotions, the same being agreeable and cooling. Lotions of vinegar and water, alcohol, brandy, or whiskey, may be used. The baths may be alkaline or acid. Carbolic acid is an excellent remedy, so also thymol, one to three grains to the ounce; chloral; chloral and camphor, each one drachm to one ounce of ointment; chloroform; ammonia water; and dilute hydrocyanic acid.

ECZEMA.

ECZEMA, popularly known as *tetter*, may be defined as an acute or chronic inflammatory, non-contagious disease of the skin, characterized at its commencement by erythema, papules, vesicles, or pustules, or a combination of these lesions, accompanied by more or less infiltration and itching, terminating either in discharge with the formation of crusts or in desquamation. The disease shows itself in such a variety of lesions as to render the construction of a proper definition a difficult matter; the definition presented above, however, embraces the essential and characteristic lesions. The lesions may be divided into primary and secondary; among the former, erythema, vesicle, papule, and pustule, or a combination of these, may be mentioned; among the latter, crust, fissure, and scale. The disease is a protean one. The subjective symptoms are burning and itching. The course of the disease may be either acute or chronic. It is more liable to relapse than any

other disease of the skin, and these may occur in any variety, and to any extent.

There are four principal varieties: eczema erythematosum, eczema vesiculosum, eczema papulosum, and eczema pustulosum.

Eczema erythematosum is a distinct inflammation of the skin, characterized by an erythematous inflammatory surface, with more or less infiltration, swelling, and itching, terminating in desquamation. In this country it is a common variety of the disease, not, as a rule, acute, but having a tendency to become chronic. It remains, generally, the same from beginning to end, and does not incline to run into other varieties. Slight moisture may, at times, be present, but the lesion, as a rule, remains dry.

Eczema vesiculosum appears in the form of pin-point to pin-head sized vesicles, usually on a red base. There is no grouping, but the vesicles tend to form variously sized patches. They appear often in successive crops, forming quickly, becoming distended with a yellowish, clear fluid, and rupturing in from twelve to forty-eight hours. The development is sometimes so rapid that one is scarcely able to note the disease in the vesicular stage.

Eczema papulosum is characterized by the formation of pin-head to small split-pea sized papules, discrete, confluent, or in patches, accompanied by itching or burning. The subjective symptom of itching is usually so violent that the lesions soon become scratched and excoriated.

Eczema pustulosum exists in the form of well- or ill-defined minute or small pustules, similar in their general features to the vesicles just described. It occurs

most frequently in infants, children, and young persons. The common sites are the face and scalp.

There are several important sub-varieties, the chief one being *eczema rubrum*, characterized by the multiformity of the lesions, some being primary, others secondary. This form is usually the further development of one of the foregoing varieties, and presents a typical clinical picture, consisting of thickening and infiltration, with more or less redness of the surface, oozing, crusting, and scaling. The discharge soon forms into crusts, which adhere closely and often obscure the lesions. Clinically, it is a common form of the disease, lasting usually months or years, getting better and worse from time to time. *Eczema madidans*, or weeping eczema, is seen in connection with eczema vesiculosum and eczema rubrum, and is characterized by an oozing, weeping, or discharging surface.

Eczema squamosum, or scaly eczema, is also common, and is generally chronic, lasting months. The scaling, as a rule, is scanty. *Eczema fissum*, or fissured eczema, occurs mostly about the hands and feet, especially the joints. *Eczema verrucosum* is so called from the papillary or warty condition of the lesions, and generally exists as a patch.

Eczema is also divided, respecting the pathological changes and the duration of the disease, into *acute* and *chronic*. The acute form occurs especially in children, and sometimes without treatment runs its course, ending in recovery in a few weeks. The disease, however, as a rule, inclines to become chronic. The distinction between the acute and chronic forms is based rather upon the character of the pathological changes that take place than upon the duration of the attack. In the latter

form the inflammation is often of a subacute type, and is accompanied by marked secondary changes.

Eczema is everywhere the commonest disease of the skin. It constitutes about forty per cent. of all skin diseases in Philadelphia. In Boston, of 5000 cases collected by White, 2242 were cases of eczema. In New York, of 8000 cases collected by Bulkley, thirty-three per cent. were cases of eczema; and in the statistics of the American Dermatological Association, there were 6179 cases out of 16,863. The disease is found in every sphere of society, among the poor and the rich; at all periods of life, from infancy to old age. It is at times hereditary, and is more common in light-haired than in dark-haired subjects. In some individuals there exists an inherent peculiarity of the constitution which predisposes to eczema. Where this tendency exists, the disease is liable to be provoked by various constitutional disturbances, such as disorders of the digestive tract, chlorosis, deficient excretion, gout, pregnancy, nervous exhaustion, and excessive mental strain. Among the local causes, cutaneous irritants, as mercury, sulphur, croton oil, tincture of arnica, dyestuffs, poison ivy, heat, friction, perspiration, alkalies, acids, soaps, and parasites may be mentioned.

It is a marked inflammatory disease, and in the acute form the changes are generally so rapid as to render their study difficult. In the chronic form there exists a chronic inflammation which it is difficult to distinguish from that found in dermatitis. The principal seat of change is in the rete and in the papillary layer of the corium. In the papular and vesicular varieties there exist respectively a circumscribed plastic infiltration and a serous exudation in and about the

papillæ, the former giving rise to papules and the latter to vesicles.

The diagnostic points are, first, infiltration, swelling, and thickening of the skin; second, exudation, which is fluid in the case of a vesicle or pustule, and plastic in the case of a papule; and third, itching, which in the vast majority of cases is a distressing symptom. Eczema may be confounded with many diseases, according to the variety which is present. In the erythematous and vesicular varieties, it may be mistaken for scarlatina, especially when the eruption has appeared universally and rapidly in one or two days; also, for erysipelas, when the eruption has appeared rapidly on the face. But in regard to both of these diseases the presence or absence of constitutional symptoms would aid in making a diagnosis. It may be also mistaken for erythema simplex, but in this affection there is absence of itching, swelling, and œdema; also, for herpes, but here the lesions are always grouped, and seldom rupture, while in eczema the vesicles burst and give rise to the formation of crusts. It may easily be mistaken for tinea favosa of the scalp; where this disease has existed for some time, pustules may form, and the picture may closely simulate chronic pustular eczema. But a microscopic examination of the crusts would render a decision. The vesicular, papular, and pustular varieties may, moreover, be confounded with scabies. This, however, is a progressive disease, growing rapidly worse from week to week, and besides, it appears at first localized between the fingers, and about the genitalia and buttocks. The presence of the burrow in scabies is, of course, a positive diagnostic point. Eczema must be distinguished from artificial inflammations, as produced by various irritants,

as, for example, croton oil, mercury, arnica, turpentine, etc. In these cases the history, the form of the lesions, and the course of the disease suffice to establish the diagnosis. The diagnosis between eczema and syphilis is not, as a rule, difficult. The vesicular lesion is practically not met with in the latter, while the papular lesions are attended with less inflammation than in eczema. The pustular variety of eczema is more superficial, and the removal of the crusts does not reveal an ulcerated surface, as in syphilis, but merely an excoriation. In pemphigus vulgaris the lesions are much larger than in eczema, and occur isolated; while pemphigus foliaceus, which resembles eczema, has a peculiar history and course of development. Pemphigus, moreover, in this country is exceedingly rare.

Eczema may be mistaken for seborrhœa, especially of the face; but it must be borne in mind that seborrhœa is a sluggish affection, accompanied with hyperæmia, and not with typical inflammation. The diagnosis between eczema and psoriasis is not always easy, especially where the latter disease is not marked, and the scales are wanting. However, the history and the course of the diseases are different, psoriasis being more steady, eczema more variable. The lesions in the former are sharply circumscribed, ending abruptly; while those of the latter generally fade away into the surrounding tissue.

Ringworm, occurring about the genitalia—especially the thighs—and extending up on to the abdomen, may, at times, closely resemble eczema; but in ringworm the lesions are sharply defined, and their borders are more or less marginate. In ringworm of the scalp, short, broken-off hairs may always be found, which, examined microscopically, show the fungus.

In sycosis, as distinguished from pustular eczema, the pustules will be found to spring from the follicles, and to be perforated by the hairs.

Eczema is a curable disease. The measures employed are both constitutional and local. In some cases constitutional treatment only avails. In acute cases, say of one to three weeks' standing, excellent results follow the use of saline aperients, as magnesia, sulphate of magnesium, bitartrate of potassium, sulphate of sodium, and Rochelle salt. For children, rhubarb may be specially recommended. Diuretics are also sometimes indicated, such as the acetate of potassium, the carbonate of potassium, and liquor potassæ. Alkaline mineral waters, as Carlsbad, are also useful. Tonics, as iron, quinine and arsenic, and cod-liver oil, are also valuable. A few words as to arsenic, our most valuable remedy. It should be given with discretion; and much better results are to be obtained by the exhibition of small rather than of large doses. In the majority of cases, the best results will accrue from the use of not more than two-minim doses of Fowler's solution. The use of the remedy must be kept up for some time. In a case of chronic universal eczema, occurring in a boy eight years old (one of the most obstinate cases that ever came under our notice in the University Hospital), local measures were of no avail, and the agent that effected a cure was arsenic. In certain forms of the disease, however, as in chronic eczema of the leg, where there is thickening, it is not to be relied on; but in the chronic papular variety, and in some forms of erythematous eczema, occurring in broken-down, debilitated subjects, where the nervous system is at fault, arsenic may be used with great advantage. It is indicated,

as a rule, only in chronic, never, or rarely, in acute cases.

Local treatment is important and is always demanded. The variety of the disease should be taken into consideration, also the amount of surface involved, the region, duration, and the history. In the erythematous variety, usually met with about the face, much benefit may be derived from the use of lotions of carbolic and boracic acids; the former is of particular value, and may be thus used:

℞.—Acidi carbolici, ... ℥ss.
Glycerinæ, ... gtt. xv.
Alcoholis, ... f℥j.
Aquæ, ... f℥iv.—M.
Sig.—Lotion. Apply several times a day.

The following lotion of prepared calamine and oxide of zinc is also recommended.

℞.—Calaminæ præparatæ, . . . ℥j.
Zinci oxidi, ... ℥j.
Glycerinæ, ... f℥ss.
Aquæ calcis, ... f℥iv.—M.
Sig.—Shake before using. Apply as a lotion three or four times a day.

Or the compound sulphide of zinc lotion, made as follows:

℞.—Zinci sulphatis,
Potassii sulphureti, . . . āā ℥ss.
Aquæ rosæ, ... f℥iv.—M.
Sig.—Apply twice a day, for ten minutes each time.

In the vesicular variety, in the acute stage, excellent results will often follow the use of black wash followed

immediately by oxide of zinc ointment. Oxide of zinc ointment is a valuable, mildly stimulating, drying ointment, and is useful alone and also in combination with other remedies. Of the various dusting powders, the following is one of the best:

℞.—Talci Veneti, ... ℥iv.
Zinci oxidi, ... ℥j.
Amyli, ... ℥iij.—M.
Sig.—Dusting powder. Apply freely.

Salicylic acid, ten or fifteen grains to the ounce of lard, and oleate of zinc, one drachm to the ounce, do well in some cases. The calamine lotion above referred to is also valuable in the vesicular variety.

Papular eczema, as a rule, requires strong lotions. Among the best is one of carbolic acid, as follows:

℞.—Acidi carbolici, ... ℥iij.
Aquæ, ... Oj.—M.
Sig.—Use as lotion several times a day.

Thymol, one-half to three grains to the ounce, may also be mentioned; and liquor picis alkalinus, the formula for the latter being as follows:

℞.—Picis liquidæ, ... f℥ij.
Potassæ, ... f℥j.
Aquæ, ... f℥v.—M.

This is to be used diluted with water in the strength of one drachm in two to four ounces of water. The liquor carbonis detergens, or alcoholic solution of coal-tar, will be found serviceable.

Strong sulphur ointments are also sometimes very valuable.

In the pustular variety, ointments of calomel, white precipitate, and sulphur, from one scruple to one drachm to the ounce of lard, may be recommended. In the squamous variety, tar is the most valuable remedy, and may be used in the form of the oil of cade, one or two drachms to the ounce of lard, or in the form of the officinal tar ointment, or as the liquor picis alkalinus, mentioned above. Ammoniated mercury, fifteen to forty grains to the ounce, may also be mentioned as serviceable. Where large surfaces are involved, a remedy like tar should first be tried on a small patch, to determine whether it will agree.

In eczema rubrum of the leg, the rubber bandage may frequently be used with benefit. In concluding the subject of treatment, it may be added that there is no one remedy which can be positively relied upon to effect a cure in a given case, especially where the lesions are extensive.

HERPES.

Herpes may be described as an acute inflammatory disease, consisting of one or of several groups of vesicles. The eruption, sometimes preceded by slight malaise, appears in the form of pin-head and pea-sized vesicles, arranged in clusters, and accompanied by heat and swelling. The vesicles contain clear or cloudy serum, and show no disposition to rupture.

Herpes facialis, familiarly known as *fever blister*, occurs more often about the lips (herpes labialis), and generally accompanies some slight digestive disorder, colds, and fevers. The lesions become dry, form crusts, and disappear, being hardly worthy of treatment.

Herpes progenitalis, another form, occurring about the genitalia, is worthy of attention on account of the possibility of its being confounded with venereal disease. The lesions consist of groups of vesicles, more or less perfectly formed, upon a red base, running an acute course, and accompanied by uneasiness and slight burning, with, sometimes, pain. The chief characteristic of these lesions, as contra-distinguished from those of eczema, is their persistency to retain their form without rupturing. In *herpes præputialis*, in which the lesions are often on the inner surface of the prepuce, they may, by rubbing on the glans, become macerated, and give rise to superficial excoriated patches which may be mistaken for chancroid. But the fact that the lesions occur in groups, which is not the case in any other vesicular disease other than herpetic diseases, should always prevent such an error of diagnosis. The treatment is simple, consisting of lotions of sulphate of zinc, five grains to the ounce of water, lead-water, diluted aqua ammoniæ, boric acid; also dusting powders. All forms tend to recover, although recurrences are common. *Herpes gestationis* is a rare herpetic disease, resembling eczema and pemphigus, occurring during pregnancy. It is sometimes a grave affection. It usually disappears after delivery. It is accompanied by intense itching.

HERPES ZOSTER.

Herpes zoster is an acute inflammatory disease, characterized by groups of vesicles upon inflamed bases, with neuralgic pains. It runs its course in two or three weeks, and between the fifth and tenth day the eruption is at its height, consisting of characteristic groups of yellowish, glistening vesicles, retaining their form, and

showing no disposition to rupture. In the old it is more serious than in the young, there being more pain, and the affection in general runs a more serious course. The varieties of the disease are made according to the regions affected. Thus, we have herpes zoster capitis, facialis, nuchæ, brachialis, pectoralis, femoralis, cervico-brachialis, dorso-pectoralis, etc. Occurring about the eye, it may be attended with the loss of that organ. It is generally unilateral, and seldom attacks the same individual twice. The lesions may ulcerate so as to leave scars, which may be distinguished from those of syphilis in that the former are in groups, and, moreover, occur in the line of the nerves.

Among the causes, cold, mechanical violence, unusual exertion, exposure, injuries to nerves, may be enumerated. It is a disease of the nerves and ganglia, consisting of an inflammation, as shown by post-mortem examination. In severe cases, treatment is called for, and positive relief may be sometimes given with the faradic or galvanic current. General treatment may consist in the administration of saline aperients, iron, and arsenic. Locally, lotions of sulphate of zinc, carbolic acid, grindelia robusta, flexible collodion and morphia, and the compound sulphide of zinc lotion, are all of service.

HERPES IRIS.

Herpes iris, regarded by some as allied to, or as an advanced stage of, erythema multiforme, may be defined as an acute inflammation characterized by groups of vesicles and vesico-papules, arranged in concentric rings, with a display of variegated colors. The lesions spread peripherally, and their color is sometimes strik-

ing, the tints being present in no other disease. It runs an acute course in one or two weeks, attacking, as a rule, the hands and forearms. It occurs generally in spring or fall, and is not contagious. There is little difficulty in distinguishing it from herpes zoster, pemphigus, or erythema multiforme, by the color of the lesions. Treatment is seldom called for, the lesions disappearing in a few weeks. The parts should be protected from friction, and a sedative lotion may be used.

MILIARIA.

Miliaria, or prickly-heat, is an acute inflammatory disease of the sweat-glands, the lesions consisting of pin-point and larger vesicles and papules, accompanied by a pricking or tingling sensation. The eruption is abundant, and may occur in successive crops, accompanied or not by sweating. It is met with in infants and in adults, especially in the weakly and debilitated. It is common in the tropics, and is also seen in this country and in Europe. The disease must not be confounded with sudamina, in which there is no inflammation. It runs an acute or subacute course, followed by slight desquamation. Relapses are common. The treatment consists of saline aperients, diuretics, quinia and iron, lotions of black wash, lead-water, sulphate of zinc, sulphate of copper, etc.

POMPHOLYX.

Pompholyx is a rare disease allied to pemphigus. The lesions consist of vesicles and blebs, excoriations with maceration, and exfoliation. It occurs mostly about the

hands (cheiro-pompholyx), fingers and palms, also the toes and soles of the feet. It is a distressing disease, and incapacitates the individual for a period of weeks, there being at times oozing and usually marked exfoliation of epidermis, accompanied by burning.

PEMPHIGUS.

Pemphigus, either acute or chronic, exists in two varieties, pemphigus vulgaris and pemphigus foliaceus, characterized by the appearance of blebs. It is a rare disease, out of 16,863 cases of diseases of the skin collected by the American Dermatological Association, there being only 14 cases. The lesions come out in successive crops, rupture, and disappear, without leaving any trace. The patient, after a variable time, may sink into a marasmus and die of exhaustion. In pemphigus foliaceus, the blebs do not come to perfection, but break down, giving rise to much moisture, causing maceration and exfoliation of the epidermis.

The causes are attributed to a disturbed nervous system, in some cases in which severe mental strain or depression has existed. The treatment consists in the long-continued use of arsenic in moderate or full doses. Locally, mildly stimulating lotions and ointments, as in the case of vesicular eczema, are useful.

LICHEN RUBER.

Lichen ruber is characterized by pin-head or pea-sized, flat, angular, or pointed, shining and scaly, dull-red papules, which are discrete or confluent, running a chronic course. There are two varieties, plane and acuminate, and these may be slight or severe. In this country, the disease is mild, compared with central

Europe. It occurs either localized or diffused, and attacks the hands, forearms, especially the flexor surfaces, the thighs, and trunk in the tracts of the nerves. It is always succeeded by pigmentation. The cause is assigned to nervous influences. It occurs more often in women than in men, and lasts a variable period, usually months. The peculiar appearance of the lesion is sufficient to distinguish the disease. The treatment consists in the administration internally of arsenic, quinine, etc., with regulation of diet, and hygiene. Locally, to allay the itching which is at times an annoying symptom, lotions of tar, carbolic acid, or thymol may be used.

PRURIGO.

Prurigo is a disease very seldom seen in this country, but it is common in some parts of Europe, especially in Vienna. It is a chronic inflammatory disease, characterized by small, rounded, numerous discrete, solid, pale-red papules, with thickening and itching. It is liable to be confounded with papular eczema, yet the pale, yellowish color of the lesions, and the fact that they generally attack the extensor surfaces, and occur usually in children, are sufficient to distinguish it.

LICHEN SCROFULOSUS.

Lichen scrofulosus is a chronic inflammatory disease, characterized by small, reddish or yellowish, grouped, scaly papules, without itching, occurring in scrofulous subjects. It is very rarely encountered in this country. It is observed chiefly in Austria.

ACNE.

Acne is an important disease on account of its frequency throughout the civilized world. It is sometimes so slight as to be unworthy of notice, while at other times it is extremely disfiguring, running a chronic course and being not infrequently difficult to cure. It may be defined as an inflammatory disease of the sebaceous glands characterized by the formation of papules, tubercles, or pustules, or a combination of these lesions, usually chronic, and occurring, as a rule, about the face.

The face is the common seat of the disease, although it is occasionally found upon the back between and over the shoulders, about the neck, and upon the chest. It is most frequently met with in early life, between the ages of fifteen and twenty-five years. There are two chief varieties—*acne papulosa* and *acne pustulosa*—sometimes occurring together, sometimes alone. A subvariety of the papular form, in which the lesions are small and discrete, is known as *acne punctata*, and a subvariety of the papular or pustular form, in which the lesions are accompanied by marked induration, is called *acne indurata*. Another inflammatory form is produced by tar and the iodide and bromide of potassium, and is termed *acne artificialis*.

The causes are very numerous. It is met with in both sexes, and occurs most frequently in light-haired subjects. It usually begins at the age of fifteen or twenty, and runs its course in one or two years, or may become chronic, and continue five, ten or more years. Among the causes, general debility, cachexia, anæmia, dyspepsia, constipation, and uterine disorders may be mentioned, the last not so much as is generally sup-

posed. The pathology of the affection consists in an inflammation of a variable grade in and about the sebaceous gland, caused by disordered secretion, tending to the formation of pustules.

The diagnosis offers no difficulty in the majority of cases. The eruptions caused by the administration of the bromide and iodide of potassium may be known by their highly inflammatory character. There are two diseases with which it may be confounded—papular or pustular syphiloderma and variola. The lesions of a papular syphiloderm may or may not be around a sebaceous gland, while in the former the sebaceous gland is always involved. Then, again, in syphilis the papules develop slowly, and may be found in other parts of the body besides the face, while the acne papule develops rapidly, and is localized, as a rule, about the face. To distinguish it from variola, the absence of febrile symptoms is sufficient.

While certain lines of treatment are extremely valuable, there are some cases which prove most rebellious. The general health must engage the attention, and any functional disorder must be corrected. Dyspepsia or constipation not infrequently is present, and saline aperients are indicated, or a mixture known as "mistura ferri acida," composed as follows:

℞.—Magnesii sulphatis, ... ℥ij.
Ferri sulphatis, ... gr. viij.
Acidi sulphurici diluti, . . . f℥j.
Aquæ menthæ piperitæ, q. s. ad. . f℥iv.—M.

Sig.—One tablespoonful with a gobletful of water before breakfast.

Another similar mixture is the following:

℞.—Magnesii sulphatis, . . . ℥iss.
Potassii bitartratis, ... ℥ss.
Sulphuris præcipitati, . . . ʒss.
Glycerinæ, ... f℥ss.
Aquæ, q. s. ad. . . . . f℥iv.—M.

Sig.—One tablespoonful with water before breakfast.

Cod-liver oil, iron, arsenic, mineral acids, quinine, and sulphur are the most useful general remedies. In some cases, especially of the pustular variety, calcium sulphide in doses of one-tenth to one-half grain gives good results; at other times it is of doubtful value. In certain cases in which there is a tendency to a hyperæmic state, ergot, in the form of ergotin, two to five grain doses, or the fluid extract, half drachm doses, sometimes acts happily. Arsenic may be used with advantage in cases of the punctate papular variety of the non-inflammatory type. Diet is an important factor in the treatment, and it must be properly regulated. Food and drink have a positive influence in many instances.

Local treatment is always necessary, and in some cases alone suffices to effect a cure. It is usually best to begin with applications of hot water, once or twice a day, the water being dabbed on the part until it becomes red. This may also be used together with soft soap, or, where the skin is sensitive, castile soap. The best soft soap is that which is imported; it should be transparent and free from bits of caustic and other impurities. Another preparation of soap which may be used is "spiritus saponatus kalinus," composed of two parts of soap and one of alcohol, perfumed with some essential oil. To stimulate the circulation of the skin in sluggish acne,

friction may be used with sand soap or sulphur soap. All comedones should be expressed, and all pustules laid open with a sharp-pointed bistoury. Sulphur ointment is the most valuable remedy, applied once or twice a day. Where the skin is oily, one of the following lotions may be used:

℞.—Zinci sulphatis, ... ℥j.
Potass. sulphureti, ... ℥j.
Aquæ rosæ, ... f℥iijss.
Alcoholis, ... f℥iv.—M.

Sig.—Shake before using; apply at night.

℞.—Sulphuris præcipitati, . . . ℥j.
Etheris, ... f℥iv.
Alcoholis, ... f℥iijss.—M.

Sig.—Apply morning and evening; shake before using.

℞.—Sulphuris præcipitati, . . . ℥iv.
Camphoræ, ... gr. x.
Tragacanthæ, ... ℈j.
Aquæ calcis,
Aquæ rosæ, ... ãã f℥ij.—M.

Sig.—Apply twice a day; shake before using.

Vleminckx's solution, diluted one part to five or ten, is often of value. It is prepared as follows:

℞.—Calcis, ... ℥ss.
Sulphuris sublimati, . . . ℥j.
Aquæ, ... f℥x.
Coque ad f℥vj, et filtra.

In applying these remedies the patient must take from fifteen minutes to half an hour each time. A valuable agent for the removal of comedones is a paste composed of equal parts of sulphur, glycerine, alcohol, ether, and carbonate of potassium. This is to be rubbed in well, and subsequently washed off with water. Where the sulphur preparations are of no avail, mercurials may be tried. Corrosive sublimate, in an emulsion of almonds, or in a lotion with alcohol and ether, one or two grains to the ounce; also ointment of ammoniated mercury, fifteen to forty grains to the ounce of lard, may be employed. Care must be exercised not to use mercurials in connection with sulphur preparations, or while giving internal medicines containing sulphur, which are eliminated through the skin, *e. g.*, calcium sulphide, as the skin becomes discolored by the formation of sulphide of mercury.

ACNE ROSACEA.

Acne rosacea may be defined as a chronic hyperæmic or inflammatory disease of the face, characterized by redness, dilatation of bloodvessels, hypertrophy, and acne. There are three stages of the disease: 1. Hyperæmia; 2. Hyperæmia with dilatation; 3. Hypertrophy. The course of the disease is chronic, and the onset is gradual. The face is the seat of the affection, and the part usually attacked is the nose, either the tip or about the alæ. Both sexes are liable, but in men it is usually more severe; in females it seldom goes beyond the second stage. In the third stage there is a new growth of tissue and bloodvessels, and the nose becomes increased in size, giving rise to the so-called rhinophyma,

or "pound-nose" of German authors. The subjective symptoms are variable, though seldom marked.

The causes are numerous and diverse. Anæmia and chlorosis and menstrual disorder in women, nervous affections, excessive indulgence in alcoholic liquors, repeated and prolonged exposure to cold, etc., all act as exciting causes.

The first stage is due to a venous congestion which causes stasis, and gives rise to the hyperæmia. After a time, the congestion continuing, the walls of the bloodvessels yield to the abnormal strain, and dilatation is effected, and the second stage is established. The passive congestion gives rise to the formation of new connective tissue, in which again new bloodvessels are formed, which cause the part to increase in size, even becoming lobulated, producing the third stage of the disease.

It may be confounded with the tubercular syphiloderm, yet its chronicity is sufficient to distinguish it, together with absence of ulceration. From lupus vulgaris it may be differentiated by the absence of the characteristic yellowish or reddish lupus tubercles and the cicatrices. It may also be mistaken for lupus erythematosus, especially when the latter disease occurs on the nose; but there the adherent scales, with minute prolongations extending into the ducts of the sebaceous glands, are usually sufficient to establish the diagnosis.

In the treatment, the same class of remedies may be employed as in simple acne. In the first two stages, ergot is sometimes of value. Linear scarification will in many cases reduce the redness; also electrolysis, by obliterating the bloodvessels. Carbolic acid, one part in two to six of alcohol, is often of service. Where

there is much hypertrophy, ablation by the knife or cautery is the only efficient mode of treatment.

SYCOSIS NON-PARASITICA.

Sycosis non-parasitica, sometimes called *sycosis* in contradistinction to sycosis parasitica (otherwise and preferably known as tinea sycosis), is a chronic, inflammatory, non-contagious disease of the hair-follicles, characterized by papules, pustules or tubercles, perforated by hairs, attended with more or less burning.

The area involved may be small or large, and the affection begins frequently in the form of small lesions, spreading from week to week or month to month until it may cover one or both cheeks. It is rarely that the whole face is involved simultaneously. The lesions are, for the most part, discrete, the pustules inclining to be flat and little raised above the surface of the surrounding skin; while, when papular or tubercular lesions are interspersed, they are decidedly raised. The regions attacked are the cheeks, chin, upper lip; either one or all. It seldom runs an acute course, but continues chronic, often for years; even where the patch is small, the difficulty in curing it may be considerable. The burning sensation is sometimes marked. The causes are often obscure.

Its pathological anatomy is well understood, the affection consisting first of a peri-follicular inflammation, which soon extends into the hair-follicle, and develops finally into a pustule. The hairs are usually firmly seated, and cannot easily be extracted without giving pain.

In the matter of diagnosis it must be differentiated from tinea sycosis, which, as a rule, is not difficult. In

the former the hairs are firmly seated, while in the latter they are readily extracted without pain. If extracted in the former, the root-sheath is also drawn out, and is often in a state of suppuration, while this is not the case in the latter, where the hairs are usually dry and sometimes brittle. Finally, in case of doubt, the microscope will reveal the characteristic fungus of tinea sycosis if this disease be present. It is distinguished from eczema in that the latter disease is not confined to the follicles, but is more diffused. There is besides, in sycosis, little discharge; the lesions do not rupture, but dry up. It occurs at all ages between twenty and sixty years, but is more common in early life.

External treatment is often more valuable than internal. In the majority of cases epilation is unnecessary. Some cases do well under mild treatment, as, for example, a lotion of black wash and oxide of zinc ointment; or sulphur ointment, one or two drachms to the ounce. Other cases call for vigorous applications of soft soap, followed by diachylon ointment. Oleate of mercury, five, ten or fifteen per cent. strength, is also useful. The treatment is similar to that of eczema of the chronic papular or vesicular variety. The hairs should be clipped and kept short. Shaving is useful in some cases, but is hurtful in others.

IMPETIGO.

Impetigo was formerly confounded with what is now recognized as the pustular variety of eczema. It may be defined as an acute inflammatory disease characterized by pea- or cherry-sized, discrete, rounded and elevated firm pustules, not attended, as a rule, with

itching. It occurs in children, commonly about the face and neck, and is at times accompanied by slight malaise. The pustules are of a typical character, are whitish or yellowish, and show no tendency to rupture, but dry up, forming yellowish crusts. It may be distinguished from eczema by the fact that in the latter disease the lesions rupture and are attended with more or less itching; also from ecthyma, in which the lesions are considerably larger, with inflammatory areolæ, and occur for the most part on the lower extremities. From impetigo contagiosa it may be known by the different character of the lesions. The treatment is simple, and consists in the application of any mild stimulating ointment. The disease tends to spontaneous recovery in a short time.

Impetigo herpetiformis is a rare and severe disease occurring in both sexes, but especially in pregnant women. It is often preceded by malaise and even fever. The lesions are itchy and multiform, the disease generally taking on the vesicular or bullous form in this country. The herpetiform grouping of the lesions is characteristic. There are but few cases on record; almost all reported by Hebra were fatal. It must be differentiated from eczema, ecthyma, pemphigus, and impetigo contagiosa.

IMPETIGO CONTAGIOSA.

Impetigo contagiosa may be defined as an acute, inflammatory, contagious disease characterized by superficial vesico-pustules or blebs, with pale or dark yellowish crusts. The lesions are inclined to be flat, soon dry up and crust over. The disease runs its course in one

or two weeks, appearing, generally, first upon the face, then upon the extremities, attacking children, and is apt to be mistaken for varicella. It rarely occurs in adults as a primary affection, but may be communicated from children having the disease. The contents of the pustules are auto-inoculable, but the cause of the disease is unknown. It is supposed by some to be due to a fungus, but this is denied by other observers. It is liable to occur in epidemics. Treatment is seldom called for, recovery taking place usually at the end of fourteen days or sooner. It must be distinguished from pustular eczema, impetigo, varicella, pemphigus, and herpes iris.

ECTHYMA.

Ecthyma is a common disease among the poor and neglected. It is an inflammatory affection characterized by large, flat pustules, which soon dry up and form brownish crusts. It occurs generally on the lower extremities, and yields to simple treatment, such as the application of a mild calomel or ammoniated mercury ointment, twenty grains to the ounce. It may be distinguished from syphilis by the absence of ulceration and loss of tissue.

PSORIASIS.

Psoriasis is one of the most important of the diseases of the skin. It may be defined as a chronic disease characterized by reddish, dry, inflammatory, more or less thickened patches, variable as to size, shape and number, and covered usually with abundant whitish or grayish, mother-of-pearl-colored, imbricated scales. The disease varies greatly as to the extent of its development,

but as a rule its characteristics are well marked. It begins in small reddish spots, which soon become scaly. These increase in size slowly, or sometimes rapidly, and, as a rule, are sharply circumscribed. The degree of inflammation varies. Itching or burning, though not infrequently absent, may be annoying symptoms.

The different sizes and shapes of the lesions give rise to the several varieties of the disease; thus, lesions in the form of points, *punctata;* drops, *guttata;* coin shaped and sized, *nummularis;* circles tending to clear in the centre, *circinata;* and segments of circles, giving a serpiginous appearance, *gyrata.* Where there are large extensive patches without any special form, *diffusa;* where large parts of the surface, as the trunk or extremities or both, are chronically involved, *inveterata.* All regions of the surface may be attacked, but more specially the extensor surfaces and the elbows, knees, back, scalp, and forehead. The palms, soles, and nails may also be invaded. The face is usually exempt. It is non-contagious, and as a rule is found in strong, plethoric, and otherwise healthy subjects rather than in the debilitated. The disposition to its development is sometimes inherited. It never attacks infants, and only rarely appears before the age of eight, and, as a rule, not before fifteen or twenty. It occurs in both sexes nearly equally, and is more common in northern climates. In ten thousand cases of diseases of the skin collected by McCall Anderson, of Glasgow, seven hundred and twenty-five were of psoriasis. It may also be associated with a gouty or rheumatic state.

Pathologically, the disease consists of hyperæmia with hyperplasia of the epidermis, with secondary inflammatory changes in the corium, resulting from pressure. It

must be distinguished from eczema, syphilis, tinea circinata, and lupus erythematosus. The sharply defined outline of the lesions, and the presence of the characteristic pearly scales, are usually sufficient to establish the diagnosis.

As to treatment, the constitution and the general condition of the patient must be taken into consideration; also the question as to how much time the patient can devote to the disease, and whether the patient is a child or an adult. Arsenic is our most valuable remedy, and it should be used judiciously and for a long period. Fowler's solution, given in two or three minim doses to an adult for months, will cure many cases. There are, however, examples in which arsenic will aggravate the disease. In these cases sometimes phosphorus, phosphide of zinc, carbolic acid, and tar capsules will prove useful. Also alkalies, as liquor potassæ, ten to twenty drops three times daily, freely diluted. This latter remedy is most useful in many cases.

Local treatment is also of great value. Applications of sapo mollis, or of an alcoholic solution of soap, followed by baths, will often be found useful. Alkaline baths must also be mentioned as serviceable adjuvants in the treatment. In highly inflammatory cases, inunctions with olive oil will sometimes prove efficacious. The most generally useful remedy is tar, in one form or another. Tar ointment is one of our most reliable remedies. Oil of cade, pure or with alcohol, one to three drachms to the ounce, applied with a brush; liquor carbonis detergens; liquor picis alkalinus; oleate of mercury; ointment of the nitrate of mercury; white precipitate ointment; and pyrogallic acid, are all excellent remedies. Chrysarobin is very valuable. It should

always be used with caution. It is liable to set up dermatitis of the surrounding skin. It stains a purplish or mahogany color everything with which it comes in contact, and this is its disadvantage. Still, it generally has a very happy effect on the lesions, often curing them rapidly. It is best applied in the following form:

℞.—Chrysarobini, ... ʒj.
Liq. gutta-perchæ, ... fʒx.—M.

Sig.—To be painted on the lesions after the scales are removed. By this means it is held to the lesions, and is less liable to stain. It may also be applied as an ointment, in the strength of from fifteen grains to one drachm to the ounce.

PITYRIASIS RUBRA.

Pityriasis rubra is a rare disease, having much resemblance both to psoriasis and to squamous eczema. It is an inflammatory disease, involving usually the entire surface of the body, and is characterized by deep-red coloration and abundant and continuous exfoliation of the epidermis in the form of large, thin, whitish scales. The disease lasts for months or years, often relapsing from time to time. The uniform red coloration, together with the rapid and abundant exfoliation in the form of extremely thin flakes, with curled-up edges, is characteristic. Treatment in most cases has little effect upon the course of the disease. Internally, arsenic is indicated, and locally mild, non-stimulating ointments may be employed.

Pityriasis rosea is a rather rare disease which has recently received attention from observers. It is inflam-

matory, occurring chiefly on the trunk, and is characterized by discrete or confluent macules, or, rarely, maculo-papules, varying in size from a pea to a silver quarter- or half-dollar. The lesions are furthermore rounded or ovoid; of a rosy, pale-red or red color; later becoming yellowish or brownish, pigmented and scaly, accompanied by but little thickening of the skin. The scaling is usually furfuraceous. It is non-contagious, non-parasitic; may run an acute course in a few weeks, or, what is much more common, last for months. It is, as a rule, unaccompanied by itching or other subjective symptoms. The disease was not recognized in this country until a few years ago, when the lecturer called attention to its distinctive features. From psoriasis and syphilis it is distinguished by the absence of infiltration, and from tinea versicolor by the absence of fungus. Some French writers claim that it is a parasitic disease, but in none of the lecturer's cases was a fungus found. It runs a benign course, and tends to spontaneous involution. It does not seem to be influenced much by treatment.

DERMATITIS.

Dermatitis signifies a simple inflammation of the skin without reference to cause, due to such agencies as heat, cold, cutaneous irritants, caustics, etc. The lesions vary with the cause, the extent of exposure, etc., and may be circumscribed or diffused. The clinical signs of inflammation are heat, swelling, pain, or itching or burning, which are present in varying degrees of intensity.

Dermatitis exfoliativa is a rare affection, and has

been described under numerous titles, such as "general exfoliative dermatitis," "recurring exfoliative dermatitis," "desquamative scarlatiniform erythema," "recurrent acute eczema," "acute general dermatitis," and "recurrent exfoliative erythema." There is a great diversity of opinion as to the true nature of the disease. It must be distinguished from eczema, psoriasis, pityriasis rubra, and pemphigus foliaceus. The disease is accompanied with more or less febrile disturbance, and is characterized by localized or generalized acute erythematous, more rarely vesicular or bullous, inflammation, followed by a variable degree of desquamation or exfoliation of epidermis. There is also a tendency to relapse.

Dermatitis traumatica is produced by direct violence, contusions, irritating articles applied to the skin, and excoriations due to the presence of parasites, the latter being generally accompanied by pigmentation.

Dermatitis venenata is a characteristic inflammatory condition caused by contact with poisonous substances. Among the most common causes are the Rhus plants commonly known as poisonous sumach, or dogwood, and poison ivy, or oak. This eruption occurs for the most part about the hands, forearms, face, lower extremities below the knees, and genitalia, and consists of a diffuse erythema, with more or less œdema, accompanied by the appearance of vesicles, blebs, and pustules. Other causes are nettle, arnica, mezereon, goa-powder, mustard, cantharides, hartshorn, croton oil, etc. The eruptions all run an acute course, and vary in intensity in proportion to the susceptibility of the individual. Some persons may handle the poisonous plants with impunity; others again, on the slightest

contact, become affected with the eruption. Some authorities contend that the affection is an eczema, but the lesions are different, being multiform, angular, and having a tendency to remain intact, while those of eczema are rounded, soon rupture, and become covered with exudation and crusting. The treatment is simple and satisfactory, external applications alone sufficing. A lotion of black wash, followed by oxide of zinc ointment, and the fluid extract of grindelia robusta, one drachm in two to four ounces of water, are valuable. The lotions are to be dabbed on every two or three hours. Lotions of the hyposulphite of sodium, one drachm to the ounce of water, or sulphate of zinc, two to five grains to the ounce, are also useful.

Not infrequently violent dermatitis is produced by aniline and coralline dyes of undergarments and stockings. Inflammations may also be provoked by individuals upon themselves, with a view to excite sympathy, with nitric acid, which gives rise to a bullous eruption; also with hartshorn and other substances. These are entirely artificial, and are known as "factitious" or "feigned" diseases of the skin.

Dermatitis calorica is an inflammation caused by extreme degrees of heat, and of cold, as in frost-bite.

Dermatitis gangrænosa is an obscure disease of the skin, occurring in the form of circumscribed or diffused patches of gangrenous skin, which, after a variable course, separate as a slough. It is usually accompanied by febrile symptoms, and may terminate fatally.

Dermatitis medicamentosa. Under this head are classed certain kinds of eruptions which may follow the ingestion of a number of remedies in common use. Thus quinine, belladonna, chloral, salicylic acid, and

mercury may give rise to an erythematous efflorescence; bromide and iodide of potassium, as a rule, give rise to pustular eruptions, resembling acne, except as to distribution. Copaiba, also, sometimes causes a cherry-red or violaceous erythematous or papular eruption.

CLASS IV.

HEMORRHAGES.

Hæmorrhagiæ, in mild or extensive form, are met with from time to time in the corium. They occur through diapedesis or as an extravasation, and are divided into two classes: idiopathic, or those resulting from external injury, as from wounds, contusions, bites of insects, as the flea, pediculus, etc., and symptomatic, or those which occur as a manifestation of internal disease, *e. g.*, purpura. The characteristic of the lesions of purpura is that they do not disappear under pressure.

PURPURA.

Purpura may be defined as consisting of variously sized and shaped, non-elevated, smooth, reddish, hemorrhagic patches, persisting under pressure. There are three varieties:

Purpura simplex consists of small, pin-head-sized lesions, usually occurring on the lower extremities, especially upon the flexor surfaces of the thighs. They make their appearance suddenly, and are accompanied by little or no constitutional disturbance. On disap-

pearing, they leave pigment residue of a yellowish, greenish, or brownish color.

Purpura rheumatica is preceded by malaise and rheumatic pains in the joints, especially those of the lower extremities. The eruption makes its appearancé suddenly or gradually, and consists of pale-red or reddish spots, varying in size from a split pea to a finger-nail, and is, as a rule, more marked about the arms and legs. It persists a few weeks or months, new lesions appearing from time to time, and as it fades away, the lesions change color, assuming a yellowish, greenish or brownish hue. It must be distinguished from papular syphilis.

Purpura hæmorrhagica, also called land scurvy, is often preceded by constitutional symptoms of a marked character, such as weakness, loss of appetite, headache, and general malaise. The eruption usually appears first upon the extremities, and soon extends upon the trunk, and consists of variously sized, irregular, hemorrhagic spots. Simultaneously with the eruption upon the surface, hemorrhages may occur in other parts, as in the mouth, bowels, etc. The disease may last for days or weeks; it may relapse, and may end fatally. It occurs in children and adults, and is not attributed to bad hygiene or want of vegetable diet, occurring in the strong as well as in the weak.

Among remedies, electricity may be mentioned, which in some cases has proved useful. Ergot, iron, and quinine are all valuable agents. Attention must also be given to diet, which should be as nutritious as possible. Rest should be enjoined, and a horizontal position be maintained.

CLASS V.

HYPERTROPHIES.

Hypertrophy of the skin consists of an increase in its elements. There may be hypertrophy of pigment, as in chloasma; hypertrophy of epidermis, as in ichthyosis; or, hypertrophy of connective tissue, as in elephantiasis. It is characterized, as a rule, by the absence of inflammation, and rarely occasions serious inconvenience. The course is, as a rule, slow, the affection generally lasting a lifetime.

LENTIGO.

Lentigo, or freckle, is a common form of pigment deposit, characterized by irregularly shaped, pin-head or pea sized, yellowish or brownish spots, found usually on the face and backs of the hands. They are generally induced by the rays of the sun. Besides the face and hands, they may occur on other parts of the body, and are liable to persist for an indefinite time. They occur, for the most part, on blondes. Occasional blackish freckles are also now and then met with. As regards treatment, corrosive sublimate is the best remedy, used in the form of a lotion, one to three grains to the ounce of water or emulsion of almonds. The application should be kept up until a certain amount of desquamation takes place.

CHLOASMA.

Chloasma is characterized by variously sized and shaped, smooth, yellowish or brownish discolorations,

occurring usually about the face. The affection is divided into varieties according to the cause, as idiopathic or symptomatic. Under the first are included those forms produced by the rays of the sun, sinapisms, long-continued scratching, as in pediculosis, etc. Under the second belong those forms occurring in the course of certain internal diseases, as chloasma uterinum, which may occur in the married or single, and is influenced by certain conditions of the uterus. It appears, as a rule, upon the forehead or cheeks in the form of dirty-looking yellowish or brownish patches, which are often extremely disfiguring. It is rarely so marked in single women as in those that are married and have been pregnant. The same form of chloasma is sometimes observed in men. The causes are numerous, and traceable in many instances to the nervous system. This observation is being more and more corroborated every year. The disease is not uncommon among the insane and those who have suffered from nervous shock. In some cases, instead of being localized, the discoloration is diffused uniformly or in patches over the whole integument. The pathology of the affection consists in an abnormal deposit of pigment in the mucous layer of the epidermis. As to the diagnosis, it may be confounded with tinea versicolor; but the former is smooth, and presents no scaling, while the latter is scaly, and usually extends itself over large areas.

With chloasma is also classified the pigmentation of the skin occurring in *Addison's disease*; also the condition following the continued exhibition of nitrate of silver, known as *argyria*. Somewhat analogous to the foregoing is that resulting from the practice of *tattooing*, in which certain pigments, as vermilion and charcoal, are

introduced into the skin. The most valuable remedy in the treatment of the various forms of pigmentation is corrosive sublimate, one to five grains to the ounce of alcohol or water, dabbed on the part two or three times a day, until a certain amount of desquamation is produced. After the pigment is thus removed it is liable to return, but it does not always do so. Vleminckx's solution, with three to six parts of water, will sometimes act happily.

NÆVUS PIGMENTOSUS.

Nævus pigmentosus consists of a circumscribed deposit of pigment of varying size and shape. It may be single or multiple, congenital or acquired. It is oval or irregular in shape, and may occur on any part of the body. When smooth and soft, it constitutes the *nævus spilus;* when rough and warty, *nævus verrucosus;* when accompanied by thickness and growth of fatty tissue, *nævus lipomatodes;* when covered with growth of hair, *nævus pilosus.* The treatment consists in extirpation or the application of caustics; the former is preferable. Caustic potash or nitric acid is here to be used with caution.

MOLLUSCUM EPITHELIALE.

Molluscum epitheliale has been carefully studied as to its pathology, and found to be an epithelial formation. Various names have been proposed, but the best is that given by Virchow many years ago, and adopted here. It is a rare affection in this country, but commoner in Great Britain. It is characterized by rounded, semi-globular, pin-head to pea sized, whitish or pinkish

papules or tubercles. They have a distended, often waxy look; are slightly flattened, and at the summit is a dark point constituting the opening of the follicle. The affection occurs, for the most part, among weakly, ill-nourished children, more rarely in adults. Some authorities contend that it is contagious; the lecturer has never seen any positive evidence offered in favor of such a view. Regarding its pathology, authorities are divided into two factions: one regarding the disease as originating in the sebaceous gland; the other viewing it as a disease of the rete. There may be truth in both theories, namely, that it is a disease of the rete, taking its origin probably in the follicles, becoming a hyperplasia of the epithelial lining and also of the sebaceous gland. Microscopically, it is found to consist of epithelial cells, with nuclei, and peculiar round or oval bodies called "molluscum bodies," and believed to be altered, fatty, degenerated epithelial cells. The disease may last two or three months, the lesions drying up or coming away as a slough. It is to be distinguished from molluscum fibrosum. The treatment consists of excision with the knife and subsequent application of a caustic, as nitrate of silver. Frequently, if left to themselves, they disappear spontaneously. Appearing on the face, however, they call for surgical interference.

CALLOSITAS.

Callositas is due to a hyperplasia of the epidermis, affecting the hands or feet. It is usually caused upon the hands by the continuous use of tools; it occurs, however, sometimes without such evident cause.

CLAVUS.

Clavus, or corn, is a circumscribed hyperplasia of the epidermis caused by continued pressure. There are two kinds, hard and soft, occurring, as a rule, upon the sides of the feet, especially on the toes. On section, it is seen to consist of an inverted cone, the point growing into and pressing down upon the corium, thereby often giving rise to pain. The treatment may consist in soaking the foot in hot water, or poulticing the corn for three or four nights, until the epidermis becomes softened and can easily be scraped away with the curette. Then, one drop of a solution of caustic potash, twenty to sixty grains to the ounce, is cautiously applied, and the corn is destroyed. Salicylic acid is also a valuable application; it forms the basis of many "corn cures." Another mode of treatment is that with plasters of sapo viridis, applied every night, say for a week, when often the greater part of the corn can be scraped out.

CORNU CUTANEUM.

Cornu cutaneum is occasionally met with, and differs in no wise from the horn of lower animals. Cutaneous horns may be single or multiple, are found usually in elderly individuals, and sometimes attain the length of several inches. They occur, as a rule, on the backs of the hands, occasionally on the face, scalp, and sulcus of the penis. It is a pure epithelial formation springing from the rete. The treatment consists of removal and destruction of the base with some cauterizing agent, as chloride of zinc or caustic potash.

VERRUCA.

Verruca, or wart, either hard or soft, consists of variously sized and shaped papillary formations. *Verruca vulgaris*, or common wart, occurs about the hands, especially on the fingers. *Verruca plana*, or flat wart, is found on the back and about the shoulders. *Verruca filiformis*, consisting of a thin, thread-like formation, is encountered on the eyelids and neck. *Verruca digitata*, a broad excrescence with finger-like processes springing from the borders, is found upon the scalp. *Verruca acuminata*, also called "cauliflower excrescence" and "venereal wart," is a pinkish, violaceous, or bright-red fleshy vegetation occurring usually about the genitalia of either sex, and often accompanies venereal disease, being caused by purulent secretion or excessive heat and moisture. It may also occur independently of any venereal disease. It takes on various forms, and, as a rule, appears in shape like a cauliflower or a cock's comb. It consists of a proliferation of the epidermis, the development being rapid; the papillæ of the corium and the corium itself are also greatly hypertrophied, and the bloodvessels dilated, rendering the growth exceedingly vascular.

The most satisfactory treatment of these growths is that by excision with the knife or scissors, and the cauterization of their bases by means of the nitrate of silver stick. They may also be removed with the galvano-caustic ligature, or treated with chromic or nitric acid or acid nitrate of mercury. In the treatment of venereal warts, astringent lotions and Labarraque's solution, together with some dusting powder, as of calomel, are highly useful.

ICHTHYOSIS.

Ichthyosis, or fish-skin disease, is met with not infrequently, and is characterized by a dryness, harshness or scaliness of the skin, and sometimes papillary growth. There are two varieties, *ichthyosis simplex* and *ichthyosis hystrix*. The former consists of a dryness or harshness accompanied by a variable amount of exfoliation, usually most pronounced upon the extensor surfaces, particularly about the knees and elbow joints. The latter is characterized by more or less pigmented, greatly hypertrophied papillæ. It is a congenital disease, and generally appears shortly after birth, first showing itself as a roughness of the skin, increasing from year to year, finally becoming scaly. Pathologically, it is a hypertrophy of the epidermis, and is one of the incurable diseases of the skin. Much, however, can be done to alleviate the symptoms. The treatment consists of alkaline baths and soaps, and the use of glycerine and simple ointments.

HYPERTROPHY OF THE HAIR.

Hypertrophy of the hair, as a general term, includes all variations as to size, number, thickness and length. The hair of the scalp may grow to an unusual length; in a case observed by the lecturer, it swept the floor. That of the beard may also attain great length, and there are cases on record in which it had reached the length of six feet. Hair may also grow upon regions where it is abnormal, as upon the face of a woman, whence the name "bearded women," who may at times be seen on exhibition. Then there

are the "homines pilosi," or hairy people, on whom the excessive development of hair is both congenital and hereditary. There are also hairy races, as, for example, the Aïnos, inhabiting an island north of Japan. Hairs are often seen upon verrucous formations, giving rise to *nævus pilosus*, being generally long and stiff. They are sometimes abnormal as to direction of growth, especially on the eyelids, giving rise to *trichiasis*. Another condition is known as *plica polonica*, where through neglect and filth the hair becomes entangled and matted together to such an extent that it cannot be combed. It was formerly common in Poland, but is rare in this country. *Hirsuties gestationis* consists of an abnormal growth of hair during pregnancy, after delivery the hairs usually falling out.

The treatment of superfluous hair is usually confined to moles and where the growth is upon the face of women. The only successful treatment is that by electrolysis, which consists in the introduction of a fine needle into the hair-follicle, the needle being connected with the negative pole of a galvanic current of sufficient strength for the purpose. The positive pole is held in the hand of the patient. When the needle is introduced and the current is allowed to pass, a certain amount of frothing is produced, the papilla of the hair is destroyed, and the hair can easily be extracted. If the operation is properly and skilfully performed, the hair will not return. Success depends upon the amount of practice, and the percentage of destroyed hairs is largely in proportion to the skill of the operator.

SCLERODERMA.

Scleroderma is an acute or chronic disease, characterized by a diffuse, more or less pigmented, rigid, stiffened or hardened, hide-bound condition of the skin. When typical, the skin is stiff, tight or immovable, and firm or hard to the touch. It may have a leathery feel, or may be hard like wood. There is, as a rule, yellowish or brownish pigmentation, occurring in irregular patches, producing a mottled condition, sometimes, also, neuralgia, pain or tingling, and generally a feeling of contraction. When attacking the face, the latter becomes expressionless, the features becoming immobile, and in an elderly person the wrinkles disappear, giving the individual a younger look. It usually attacks large surfaces, and may even interfere with deglutition or respiration. It is usually general and symmetrical. The invasion is sudden or gradual, usually the latter, and it may run an acute or chronic course. The general health continues good, and the course of the disease is variable, lasting months or years, sometimes undergoing spontaneous involution. The causes are obscure. It is a very rare disease, occurring generally in early life or middle age, and is more common in women than in men.

The microscopic examination of the tissue throws little light upon the true nature of the disease, exhibiting a condensation of the connective tissue of the corium, with a deposit of pigment in the rete. It is generally regarded as a tropho-neurosis, being originally a hypertrophy leading later to atrophy. It is closely allied to morphœa, sometimes being associated with this disease. The former, however, as a rule, attacks large

areas and is diffuse, while the latter appears in small patches and is circumscribed. The treatment consists in the internal administration of arsenic and quinine, and the use of stimulating ointments, baths, especially inunctions of oil, and the constant electric current.

MORPHŒA.

Morphœa, also formerly called keloid of Addison, occurs in the form of patches, rounded, ovoid or irregular in outline; small or large, soft or firm, tough or leathery, smooth or shining. In color they are pale yellowish or brownish, and often have a distinctly lardaceous look, like a piece of raw bacon set in the skin. In the early stage minute plexuses of bloodvessels may be seen around the patches, also more or less pigmentation in the form of a distinct halo. The lesions are, as a rule, asymmetrical, and may attack any part of the body, but more particularly certain regions, as the face, neck, chest, back and thighs. Becoming fully developed, they may remain stationary for months or years, or they may rapidly disappear, leaving the skin normal or atrophic. The course is generally chronic. The disease may also manifest itself in the form of atrophic, pit-like depressions in the skin, lines, streaks and telangiectases. The causes are unknown. It occurs more often in women than in men, and is thought to be largely due to the influence of the nervous system. The pathological changes consist of a condensation of the connective tissue of the corium and a shrinkage of the papillary layer. The treatment should be stimulating and tonic. Arsenic is the best remedy, and is of value.

It should be continued for six months to a year. The galvanic current should also be tried.

HEMIATROPHIA FACIALIS.

Hemiatrophia facialis, or unilateral atrophy of the face, is a form of morphœa, and consists of a variable degree of atrophy affecting part or whole of half of the face. The process involves the skin, subcutaneous connective tissue, and deeper structures, sometimes even the bone. It has been observed in connection with patches of typical morphœa.

SCLEREMA NEONATORUM.

Sclerema neonatorum is a disease of infancy, appearing usually at birth, consisting of a diffused stiffness and hardness of the cutaneous and subcutaneous tissues, accompanied by coldness, œdema, swelling, discoloration, lividity, and general circulatory disturbance. The disease is very rare, and is usually congenital. The skin assumes a glossy, reddish or purplish, yellowish or brownish hue, and is firm or hard, rigid and tight. The surface is cold, and there is more or less œdema and infiltration. Rarely, spontaneous recovery sets in; the disease is, however, generally fatal. The cause is unknown. Microscopic examination of the skin shows the subcutaneous connective tissue to contain a "stearine-like deposit." The treatment should consist of stimulating measures, such as gentle friction, application of warmth, and oily inunctions.

ELEPHANTIASIS ARABUM.

Elephantiasis arabum is a chronic, hypertrophic disease of the skin and subcutaneous connective tissue,

characterized by enlargement and deformity of the part affected, accompanied by lymphangitis, swelling, œdema, thickening, induration, pigmentation, and papillary growth. It usually begins with erysipelatous inflammation accompanied by general febrile symptoms, the process being followed by slight permanent enlargement. The attacks recur, each time the enlargement becoming more marked, and later being followed by pigmentation and hypertrophy of the tissues. The legs and genitalia are the regions generally affected. The disease is found everywhere, but is most common in the tropics, about the line of the equator, especially in eastern countries. It is due to obstruction and inflammation of the lymphatics. Filariæ have been found in the blood of persons affected, and the parasite is thought by some to be the cause of the disease. Cases of enlargement of the scrotum, called "lymph scrotum," are also allied to the disease in question, and the chylous exudation of the former also contains filariæ.

The tissues on section are firm and of a whitish or yellowish color. The lesion consists of a hypertrophy of the connective tissue, chiefly of the subcutaneous connective tissue, stout fibres running in various directions, forming a dense network. The epidermis is often greatly developed, forming warty, papillary growths, while the bloodvessels and lymphatics of the corium are much enlarged. Where the process has continued for some time there is fatty degeneration and atrophy of the muscles, also enlargement of the bone. In well-marked cases, in which the disease has existed for a time, there is no difficulty about the diagnosis, and in

the early stage repeated attacks of erysipelas about the limb may indicate the nature of the process.

As for treatment, during an attack of erysipelas, rest, quinine, and iodide of potassium are indicated. After the inflammation has subsided, the rubber bandage should be closely applied. Where the scrotum is greatly involved, amputation is a comparatively safe method of treatment, much practised in China.

DERMATOLYSIS.

Dermatolysis consists of a more or less circumscribed hypertrophy of the cutaneous and subcutaneous structures, characterized by softness, looseness of the skin, and a tendency to hang in folds. The skin and all its component parts are hypertrophied, including hairs, follicles, glands, and deeper structures. More or less pigmentation also exists. The disease usually attacks the back, face, and arms, also, rarely, the abdomen, genitalia, and thighs. The process is allied to molluscum fibrosum, the tissues being of a soft, fibrous, lipomatous character. The only treatment is with the knife.

CLASS VI.

ATROPHIES.

Atrophies are characterized by diminution or degeneration of the elements of the skin. The process may be a simple atrophy, as of pigment in canities, or an atrophy and a hypertrophy combined, as in vitiligo, or, still further, a degenerative atrophy of the skin and subcutaneous connective tissue, as in morphœa. The pigment, skin proper, subcutaneous connective tissue, hair and nail, may all suffer from atrophy.

ALBINISM.

Albinism is a congenital absence of pigment, either partial or universal, of the skin, hair, iris and choroid coat. The hair is usually white or yellowish and silky. The persons thus affected are called *Albinos*. The condition occurs among all races, of the north as well as of the south, and constitutes a curious anomaly. Partial albinism sometimes occurs, especially in negroes, who are spoken of as "pied" or "piebald." Interesting cases of albinism were those known as the Cape May Albinos, where the parents were negroes having six children, three of whom were Albinos and three were black.

VITILIGO.

Vitiligo is an acquired disease, coming on at any age after birth, and is characterized by defined, rounded, ovoid or irregularly shaped patches of whitened skin

surrounded by a variable amount of yellowish or brownish pigmentation. It usually begins in one or several places, which are pinkish or whitish, and surrounded by a brownish areola. These spots vary in size from a coin to the palm of the hand, and have a tendency to coalesce, forming larger patches. It is an atrophy of pigment surrounded by a hypertrophy of pigment, or a diminution of pigment surrounded by an excessive amount. The regions most commonly affected are the face, backs of the hands, and the trunk. When marked on the trunk it is not so apt to attack the hands or face. The course is, as a rule, slow, extending over years. The disfigurement is marked if occurring about the face or hands. There are no subjective symptoms, nor is there any disturbance of the general health. The disease is under the influence of the nervous system.

It is to be distinguished from chloasma in that the latter affection consists of yellowish or brownish spots without whiteness; also from tinea versicolor, in which there is more or less furfuraceous scaling, the scales containing a fungus. In the way of treatment, much can sometimes be done. Arsenic used judiciously, in small doses, for a period of months or years, is in some cases followed by marked improvement. Local treatment is seldom of avail. The prognosis should always be guarded, as the disease may last a lifetime.

CANITIES.

Canities, or graying of the hair, may be either premature or due to old age. It may be partial, occurring in streaks or locks, or it may be universal. The color is variable, sometimes being one shade, sometimes two

shades, as in Mr. Wilson's case, in which the hairs in their entire length presented alternate brown and white markings, the latter marking being supposed to be due to the presence of air globules. The hair may also change color, as a yellowish shade may turn into a black, or a brown into a red. Changes may also occur after severe illness, as after scarlet fever, brown hair being replaced by white. As a rule, time is required for alteration of color, but the question has often arisen as to whether a change could take place suddenly, and this question may be answered in the affirmative. Under nervous shock, or strong emotional influence, sudden graying of the hair may take place. Some authorities, as Wilson, explain the phenomenon by the presence of air bubbles in the hairs.

ATROPHIA CUTIS.

Atrophia cutis, or atrophy of the skin proper, is by no means common. In simple atrophy, where there is a diminution of the cutaneous tissue elements, the skin presents a thin, dry, shrivelled appearance, and in degenerative atrophy, where there is structural change without loss of substance, the skin is somewhat hardened, and presents a waxy, fatty appearance. It may occur in streaks, spots or patches, or it may follow other processes, as lupus erythematosus, syphilis, seborrhœa and tinea favosa. *Glossy skin* is a condition due to impaired nutrition occurring about the extremities, especially the fingers, consisting of pinkish, reddish, smooth, shining lesions, like chilblains. *General idiopathic atrophy* comprises such cases as have been described by Wilson, Hebra, Hutchinson, Taylor and others, and known

under the name of "xeroderma of Hebra," or "parchment skin." The condition is allied to morphœa, and the lesions exhibit a tendency to develop into epithelioma. They are disseminated, and consist first of a congeries of bloodvessels, accompanied by pin-head to split-pea-sized telangiectases and excessive pigmentation.

STRIÆ ET MACULÆ ATROPHICÆ.

Striæ et maculæ atrophicæ may be either idiopathic or symptomatic. The former manifest themselves as lines, one or two inches in length, or as pin-head to finger-nail sized, round or oval spots, presenting a smooth, shining surface. These are seen most frequently about the pelvis and on the flexor surfaces. The latter consist of those atrophic lesions brought about by overdistention of the skin, as seen in pregnancy and ascites.

ALOPECIA.

Alopecia is a term used to express more or less complete, partial or universal baldness, irrespective of cause. The varieties are as follows: In *congenital alopecia* it may be partial or entire, usually the former. In one case, reported by Schede, excised portions of the scalp failed to reveal under the microscope the presence of hair-bulbs. *Senile alopecia*, or baldness of old age, is characterized by the permanent loss of the hair, accompanied by atrophy of the skin. The affection begins about the crown of the head; the hairs, often first turning gray, become thin, dry, and finally fall out. Men are more frequently affected than women. *Idiopathic premature alopecia* begins, as a rule, between

the ages of twenty-five and forty, and may run a slow or rapid course. The hairs fall out without apparent cause, and are at first replaced by finer hairs, which in turn are shed. It also usually begins about the vertex and extends forward. It is very common, and is found more frequently in males. *Symptomatic premature alopecia* is a form of baldness which may accompany or follow certain diseases, and may be temporary or permanent. Such a condition may occur after nervous shock, severe fevers, protracted seborrhœa, lupus erythematosus, certain parasitic diseases of the scalp, leprosy and syphilis. *Syphilitic alopecia* is generally one of the early manifestations of syphilis, and occurs before the syphilodermata, or later, as a result of ulceration. As one of the early symptoms, it gives the patient much concern, as it is sometimes copious, involving even the eyebrows and eyelashes. It lasts usually but a few months.

ALOPECIA AREATA.

Alopecia areata is an atrophic disease of the hairy system, appearing usually in the form of whitish, smooth, bald patches, of varying size and shape. It may come on suddenly or gradually, generally first invading the parietal or occipital regions of the scalp; it may also affect other hairy parts of the body. The patches are usually rounded, vary in size from a coin to the palm of the hand, are smooth and polished, and are whitish in color. Occasionally there are a few short, atrophied hairs to be found, but as a rule the hair-follicles are shrunken, closed, the skin becoming thin, similar to that of an old man. The course of the disease, whether left to itself or under treatment, is variable, months

or years elapsing before complete recovery sets in. The latter may never occur. The prognosis varies according to the history and duration of the disease and the age of the patient. The younger the individual, the more favorable. In young persons, complete restoration of the hair is the rule, the patches first being covered with lanugo, and later by the normal growth. In some cases recovery sets in spontaneously.

The causes are not well understood. It is not of parasitic origin. It is attributed to nerve disorder, producing a temporary arrest of nutrition. The disease may be regarded as a tropho-neurosis. Microscopic examination of the hairs reveals atrophy of the bulbs. It may be confounded with tinea tonsurans, and cases have been recorded in which the two diseases existed together. But the blanched, atrophied condition and smoothness of the patch, and the absence of fungus in the former, are sufficient to give the diagnosis.

As regards the treatment, locally, a number of remedies exert a good influence; for example, sulphur, some of the mercurial salts, tar, oil of cade, and carbolic acid. The following prescription may also be used, full strength or diluted, as a stimulating lotion:

℞.—Tr. cantharidis,
Tr. capsici, ... āā f℥jss.
Ol. ricini, ... f℥ij.
Spts. lavandulæ,
Spts. rosmarini, ... āā f℥ss.—M.

Sig.—Apply daily.

Ointments of tar and of sulphur are, perhaps, our most valuable remedies. Blistering is recommended by some,

also turpentine, and mercurials, as ammoniated mercury, forty to one hundred grains to the ounce. As regards internal treatment in alopecia areata, arsenic is the best remedy, and, given in tonic doses for months, will in some cases be followed by good results. In this disease, local measures, as a rule, exert no influence until after the hairs begin to grow.

ATROPHY OF THE HAIR.

Atrophy of the hair takes place as a result of certain diseases of the scalp, or certain constitutional diseases, as syphilis. The hairs become fragile and dry, and sometimes have a tendency to split in the follicle, producing irritation. It is due to improper nutrition. *Trichorexis nodosa* is another peculiar condition of the hair, in which there is a series of small, spindle-shaped, bulbous swellings along the shaft, looking not unlike nits. The free end of the hair is split up, and presents a brush-like appearance. *Piedra*, also a nodosed condition of the hair, occurring in Colombia, is said to be due to a fungus.

ATROPHY OF THE NAIL.

Atrophy of the nail is as a rule acquired, and is characterized by a dry, brittle, "worm-eaten" condition. It may be due to syphilis, eczema or psoriasis; also to the fungus of tinea favosa and of tinea tonsurans. For simple atrophy of the nail, and that due to eczema and psoriasis, arsenic is the best remedy.

CLASS VII.

NEW GROWTHS.

New Growths, neoplasmata, comprise a large and important class of diseases. They are composed of connective tissue, as xanthoma and molluscum fibrosum, or of a cellular deposit, as in lupus and syphilis. New growths may be benign, as xanthoma, or malignant, as cancer, or intermediate, as lupus. They are, as a rule, not painful, and run a chronic course, lasting for years.

KELOID.

Keloid is a connective-tissue new growth, consisting of one or more irregularly shaped patches or tumors, variously sized, reddish, smooth, elevated, firm and elastic. The lesions may be the size of a pea, a bean, or a finger; in shape elongate or ovoidal, firmly seated in the skin, and presenting a smooth, glossy surface, of pinkish, more or less variegated color. The form is generally peculiar, consisting of a body with diverging processes, not unlike a spider or a crab. Its growth is slow, occupying years, and the tumor is seldom painful except on pressure. Cases in which the lesions develop after burns are sometimes exceedingly painful. Respecting a cause, keloid may be divided into two varieties,—spontaneous, in which it develops without any apparent cause, and cicatricial, where it develops after

injuries, as burns, cuts, and severe flogging. It is also noticeably more common in the colored race.

Pathologically, the lesion is situated in the corium, and consists of dense fibrous tissue made up of closely packed fibres like cicatricial tissue. According to some, the change begins in the walls of the bloodvessels. The diagnosis offers no difficulty.

Treatment is, as a rule, unsatisfactory. The more the knife is used the more the disease spreads; it almost invariably recurs after operation. According to Vidal, repeated scarification is useful. Wilson recommends diachylon plaster, and in some cases it gives fair results. The growth sometimes disappears spontaneously.

MOLLUSCUM FIBROSUM.

Molluscum fibrosum is a connective-tissue new growth, sessile or pedunculated, soft or firm, rounded and variable as to size. It is single or multiple, the lesions being usually numerous and about the size of a pea. They grow upon the general surface, especially the trunk. They may begin at any age, grow slowly, and, having attained the size of a pea or cherry, remain stationary. There is no pain or annoyance attending their development. The cause is unknown. The disease is, however, apt to appear in individuals of a sluggish temperament, in those who are dull and exhibit little physical or mental energy. The tumors consist of a whitish or yellowish fibrous tissue, being denser and compacter about the base. They cannot be enucleated, being usually firmly bound to the subcutaneous connective tissue. The disease takes its origin in the connective tissue surrounding the fat globules. It is to be dis-

tinguished from molluscum epitheliale and sebaceous tumor, also from lipoma. The treatment, when the lesions are not too numerous, consists of extirpation with the knife, ligature or galvano-cautery.

XANTHOMA.

Xanthoma is also a connective-tissue new growth, which has of late excited attention, especially in England, where the disease seems to be most frequently met with. It is characterized by yellowish, circumscribed, irregularly shaped, soft, flat or raised patches or tubercles. There are two varieties, which clinically are entirely distinct,—*xanthoma planum* and *xanthoma tuberosum*. The lesions are in the corium, and the patches have the look in the flat variety of being inlaid, resembling pieces of chamois-skin laid in the skin. They are usually met with about the eyelids, in the form of narrow semicircular patches, sharply defined, of a pale or dark buff or lemon color, and may extend from one canthus to the other. They give rise to no pain or inconvenience, but may give the individual a grotesque appearance.

The tubercular form consists of pin-head, pea-sized or larger tubercles, of a buff or golden color, occurring on the neck, trunk and extremities. It is a disease usually of middle life, but is exceptionally met with in children. The lesions may be single or multiple. The multiple form (*xanthoma multiplex*) is rare. They develop as a rule gradually and pursue a slow course.

The causes are not known. It has been supposed that the disease has some connection with hepatic disorders, and this is sometimes the case in the multiple

variety; *xanthoma palpebrarum*, on the other hand, is seldom connected with jaundice. The disease is more common in women than in men. Pathologically, the growth consists of fatty degenerated connective tissue. The treatment is excision, which in suitable cases is usually satisfactory. Spontaneous involution occasionally occurs.

RHINOSCLEROMA.

Rhinoscleroma is a rare disease, chiefly encountered in Germany, consisting of a circumscribed, irregularly shaped, flattened, tubercular, remarkably hard and dense, cellular new growth, having its seat about the nose. It seems to be unknown in this country, no typical case being as yet reported.

LUPUS ERYTHEMATOSUS.

Lupus erythematosus is a cellular new growth, characterized by variously sized, rounded or irregularly shaped, more or less inflammatory, scaly patches, having its seat usually about the face. The disease generally begins as a small, insignificant, reddish patch, with slightly adherent scales, increasing gradually in size from week to week or month to month. Later, new lesions spring up. They are pale or deep red or of a violaceous tint, having usually a well-defined border, slightly elevated, and covered with yellowish or grayish, sometimes sebaceous, scales. The latter are attached to the openings of the sebaceous glands, which are distended by plugs of sebum. Sometimes the patches grow rapidly with inflammatory symptoms. There may be, at times, heat and itching. One, two or

more patches are usually present, and the region generally attacked is the face, especially the nose and cheeks, the lesions often assuming a butterfly form. The affection runs a chronic course, it may be for years, spreading, and in some instances disappearing from time to time, leaving soft, whitish, superficial, more or less punctate, atrophic scars. It is by no means a rare disease, and is rather more frequently encountered in women than in men. It seldom appears before adult age, and in this respect differs from lupus vulgaris. It may develop from a simple congestive seborrhœa; in other cases the causes are obscure. It is a combined process, consisting of an inflammation and of a new growth. It often begins in the sebaceous glands, also sometimes about the sweat glands.

Microscopical examination of recent lesions reveals aggregations of small round-cells around the follicles and glands, together with other inflammatory changes. Later stages show retrograde changes in the tissues which lead to absorption and atrophy. If the retrograde metamorphosis takes place early, no cicatricial tissue is found, and no trace of the lesions remains.

The diagnosis is, as a rule, easy; the regions affected, the sharply defined patch with border, the adherent, yellowish scales, and the involvement of the sebaceous glands, are all important differential points, and serve to distinguish it from lupus vulgaris, syphilis, psoriasis and seborrhœa. The disease is generally obstinate, but in the inflammatory types should not be treated too actively, as with caustic remedies, at first. Internally, iodine is valuable in some cases in the form of iodized starch, as recommended by McCall Anderson, consisting of twenty-four grains of iodine, triturated with water,

and one ounce of starch gradually added. This is given in drachm doses. Iodide of potassium, cod-liver oil, and arsenic are also of value in some cases, especially when there is impaired nutrition. External treatment, however, usually gives the best results. In mild cases, sapo viridis, used in the form of plaster, or in combination, two parts to one of alcohol, used as a lotion, is an efficient agent. When there is seborrhœa, sulphur ointment may be used. In the superficial variety, the following is valuable:

℞.—Zinci sulphatis,
Potassii sulphureti, . . . āā ℥jss.
Aquæ rosæ, ... fℨiv.—M.

Sig.—Shake. Apply several times a day, five to fifteen minutes at a time.

Mercurials, carbolic acid, and tar are also of value. Tincture of iodine and glycerine, as recommended by Hebra, is at times useful. The following mixture will sometimes prove of service:

℞.—Ol. cadini,
Alcoholis,
Saponis viridis, ... āā ℥ss.—M.

Sig.—To be rubbed in morning and evening.

Caustics should be used with caution. A useful method of treatment is that by scarification, multiple or linear, whether in the deep-seated or superficial variety. The prognosis should always be guarded.

LUPUS VULGARIS.

Lupus vulgaris is a cellular new growth, characterized by variously sized and shaped patches of a reddish

or brownish color, made up of macules, papules or tubercles, the disease usually terminating in ulceration and cicatrices. It generally begins in the form of small, grouped or disseminated points in the skin, of a yellowish or brownish color. These coalesce, forming patches of various sizes. They may also develop into papules and tubercles, the condition being then known as *lupus tuberculosus*, a common form of the disease, the lesions being rounded, defined, and varying in size from a pin-head to a split pea. The tubercles may then undergo absorption, leaving a desquamative surface (*lupus exfoliativus*), or ulceration, causing destruction of tissue (*lupus exulcerans*). The ulcers may also be the seat of excessive granulation (*lupus hypertrophicus*). The disease appears, as a rule, in childhood, running a chronic course, persisting even throughout life. It attacks the face, as a rule, especially the nose, upper lip, and cheeks; also the ears, hands, and even the mucous membrane of the mouth and larynx, often producing much destruction of tissue, and, through the formation of extensive cicatrices, ugly deformity. Little can be said respecting the cause. It is related to the condition known as scrofula, and generally begins before puberty, differing in this respect from lupus erythematosus. It is rarely hereditary, and attacks both sexes equally. It is one of the rarer diseases in this country, but is common in Southern Europe.

The disease is sometimes met with in connection with scrofula, but in many cases is distinct from this affection. Pathologically it is a chronic inflammatory process characterized by a small-cell infiltration, tending to form in groups, and having its primary seat in the corium. These cellular groups are called by Kaposi "lupus

nodes." Giant cells are also occasionally encountered. The combination of lupus and epithelial cancer is occasionally met with, the cancer developing from the rete and glandular elements of the skin long affected with lupus. It must be distinguished from syphilis, cancer, lupus erythematosus and acne rosacea. From syphilis it may be differentiated by the character of the ulcer, its slow, chronic course, slight, inoffensive discharge, and scanty crust. The cicatrices are moreover hard, irregular and yellowish, while in syphilis they are soft and whitish. From cancer lupus is easily distinguished. Cancer is as a rule localized, circumscribed, painful, indurated, and is accompanied by great destruction of tissue ; it is furthermore a disease of later life. Lupus erythematosus occurs after puberty, is never accompanied by tubercles or ulceration, and shows usually disorder of the sebaceous glands, which last is not the case in lupus vulgaris. From acne rosacea it may be distinguished by the history of the lesions and by the dilated bloodvessels and the pustules.

Regarding treatment, the disease will always be found obstinate, and usually nothing short of heroic remedies yields good results. Internally, iodide of potassium and cod-liver oil are valuable remedies. External treatment is, however, most important, and a large number of remedies have been recommended, most of them being of a stimulating or caustic nature. In the early stage of the process stimulating applications, such as equal parts of iodine and glycerine, mercurial plaster, and tarry lotions and ointments, may be employed with a view of bringing about absorption. In a majority of cases caustics will have to be resorted to, and those most generally used are nitrate of silver in stick form,

pyrogallic acid, carbolic acid, caustic potassa, chloride of zinc, and arsenic. One of the most valuable methods of treatment is that by erasion with the curette. Scarification, multiple or linear, is also highly useful; it must be repeated at intervals, and it will be noted that the lesions grow a shade paler after each operation.

SCROFULODERMA.

Under the term scrofuloderma are designated those cutaneous changes which manifest themselves in strumous or scrofulous subjects. The most common lesion is the scrofulous ulcer, which is a degeneration of the skin resulting from the ulceration of an underlying lymphatic gland. Such an ulcer is usually elongate, of a violaceous or pinkish color, with an uneven surface, undermined here and there, and exhibits little tendency to undergo reparative change. Another lesion is the variously sized, irregularly shaped, yellowish, flat pustule, met with upon the trunk and extremities, running a chronic course and leaving superficial scars. Another and rarer form is the fungoid variety, appearing perhaps most frequently about the extremities, especially the hands.

The treatment consists in the administration of such remedies as cod-liver oil, sulphur, iodine, phosphorus, and lime. Locally, stimulating ointments are indicated, and above all the use of the curette, as in the treatment of lupus vulgaris.

SYPHILIS OF THE SKIN.

Syphilis of the skin, or syphilis cutanea, includes the various manifestations upon the skin due to syphilis.

The syphilodermata occur in a manifold variety of lesions, in more numerous forms even than eczema, and the statement of some authorities, that there is scarcely any form of cutaneous lesion which syphilis may not assume, is suggestive.

General symptoms are, as a rule, absent, though slight fever, malaise and languor are sometimes met with. Other symptoms usually concomitant are enlargement of the lymphatic glands, angina, alopecia and the occurrence of mucous patches. Syphilis attacks no particular region, although the different forms of eruption show preference for certain localities. Symmetry is a characteristic of the earlier eruptions; irregularity in distribution, of the later forms.

The lesions of cutaneous syphilis are noted for their multiformity, almost all of the forms common to other cutaneous diseases being liable to appear, the papule and pustule, however, being the most frequent. Polymorphism is commoner in the earlier than in the later eruptions. The configuration is also peculiar, the earlier lesions being rounded, while the later assume an annular, crescentic or serpiginous form. The color varies with the age, complexion, and stage of the disease. Early lesions are first of a pinkish or dull-reddish hue, usually passing through varied tints to a violaceous, coppery or brownish-red color. Older lesions, especially papules and tubercles, often have a deep-red, cold, non-inflammatory look.

The course of the disease is usually slow; especially is this the case with the later forms. Relapses are common. Subjective symptoms are, as a rule, absent; pain is, however, sometimes present with ulcerative

lesions. Itching occasionally accompanies the small papular and pustular syphilodermata.

Syphiloderma erythematosum, or macular syphiloderm, consists of rounded or ovoidal macules, pea- to finger-nail-sized, ill-defined, faint or marked, bright or dull pinkish or violaceous, often presenting a mottled or marbled appearance. Later, the lesions grow darker, assuming a dirty-yellowish, dusky-brownish or coppery color, and then disappear. They are generally numerous, and appear first upon the trunk, abdomen and thorax, then upon the flexor surfaces of the limbs, and sometimes upon the face. The eruption has no regular distribution. It is the earliest syphiloderm, and appears in from six to ten weeks after the initial lesion, with or without malaise or other general symptoms or signs of syphilis. Its development is, as a rule, slow, requiring one to two weeks, though it may be rapid, coming out over night or after a hot bath. Its duration varies from a few weeks to several months. It must be distinguished from measles, rötheln, urticaria, and medicinal eruptions—as from quinine and copaiba; also from tinea versicolor.

Syphiloderma papulosum is an eruption in which the lesions vary in size and shape, generally being the size of a millet-seed, pea or small bean, acuminate or flat, discrete or confluent. On account of this variation in size, the division into the small and large papular syphiloderm is proper, by which cases can be more easily and precisely classified.

The *small papular syphiloderm*, also called the miliary papular syphiloderm, occurs in the form of millet-seed sized, rounded or acuminate, generally profuse lesions, which are elevated, firm or solid, dis-

seminated or grouped, and of a bright or dull red color. The eruption is usually well marked; occurring as an acute process it may appear in a few days. It may be an early or a late manifestation, showing itself at any time between the second and twelfth month; when late, it is generally in conjunction with the large papular syphiloderm. It is mostly seen on the trunk, upper extremities and thighs, and is more common in debilitated subjects and in women than in men, and runs a chronic course, leaving pigment stains. In the matter of diagnosis, it is to be distinguished from keratosis pilaris, from papular eczema, and from psoriasis punctata.

The *large papular syphiloderm*, also called the lenticular papular syphiloderm, consists of pea to bean sized flat, rounded or ovoidal, elevated, firm and circumscribed, pale or dull red lesions. They are usually profuse and are found more abundantly in certain localities, as on the forehead, nape of the neck, back, and flexor surfaces of the extremities. It is one of the commonest of the syphilitic eruptions, and is an early manifestation, closely following the erythema, and is often rebellious to treatment. Location influences these lesions and effects certain modifications in them. When arising on the mucous membrane of the mouth or in the axilla, groin, about the genitalia or beneath the mammæ in women, where the skin on account of opposing surfaces is kept moist by excessive perspiration, the epidermis becomes macerated and the lesions are then called *moist papules*, or *flat condylomata*. Sometimes there is an excessive proliferation of the rete cells giving rise to papillary or warty growths—occasioning the *hypertrophic* or *vegetating syphiloderm*. On the other

hand, the papule may undergo the opposite change, giving rise to the *papulo-squamous syphiloderm*, in which the lesions are for the most part grouped, forming patches, and covered with layers of thin, grayish, more or less adherent scales. The regions thus attacked are usually the palms and soles, and the character of the lesions is due to the peculiar anatomy of the skin in those regions, the epidermis being very thick. The eruptions are also known as the *palmar* and *plantar syphiloderms*. They are generally symmetrical, occurring usually in the centre of the palms or soles, the lesions for the most part assuming a crescentic shape with elevated edges. When unilateral, it is generally a late manifestation. It is liable to be mistaken for eczema, psoriasis and callosity, but the history and development of the lesions, together with the shape and sharp definition, are usually sufficient to establish the diagnosis.

Syphiloderma vesiculosum is an exceedingly rare form of cutaneous syphilis, there being but few marked cases on record. The lesions generally resemble those of varicella, and usually appear about the face and genitalia, where the skin is thin.

Syphiloderma pigmentosum (syphilitic chloasma) is very rare in this country, but more common in France. It occurs chiefly upon the neck, mostly of women with delicate, thin skins, and, usually, in the second year after infection. The lesions are pea-sized, and consist of simple, pale-brownish, pigmentary deposits.

Syphiloderma pustulosum constitutes an important class, and is divided into varieties according to the size and general characters of the lesions.

The *small acuminated pustular syphiloderm* is similar

in appearance to the miliary papular syphiloderm, except that the lesions are pustules, and may often be an advanced stage of the latter. The lesions consist of small, pin-head sized, rounded or pointed pustules situated on a red elevated base. They are always abundant, occurring as discrete or confluent lesions, forming large groups, circles or crescentic patches. Their favorite seats are the arms, thighs, chest, and back. Sooner or later the puriform contents dry into yellowish crusts, which dropping off are followed by pigmentary stains. This eruption may occur as early as the second or third month, and in this case usually disappears rapidly.

The *large acuminated pustular syphiloderm* may resemble acne very closely, and is sometimes also difficult to distinguish from variola. It is acute or chronic, usually the former, and accompanied by pain, languor and fever. It attacks the face, scalp and trunk, and also the upper extremities and the thighs. It is a somewhat rare manifestation, generally occurs early, and is amenable to treatment.

The *small flat pustular syphiloderm*, or impetigo-form syphiloderm, is also a rare variety, looking not unlike pustular eczema. The pustules occur in patches for the most part upon the face around the nose and mouth; also about the genitalia, the lesions soon rupturing, forming yellowish, greenish or brownish crusts.

The *large flat pustular syphiloderm*, or ecthyma-form syphiloderm, consists of finger-nail sized flat pustules upon a red base, which soon form crusts. There are two varieties, the superficial and deep-seated. In the former the flat, yellowish-brown crusts cover a superficial, freely secreting ulcer, and the lesions generally appear after the sixth month, and mostly upon the back,

shoulders and extremities. The deep-seated variety, known as *rupia*, is a late manifestation, and possesses a malignant character. The crusts are thick, stratified, hard, of a greenish or blackish color, and cover a sharply defined, excavated ulcer, secreting a copious, greenish, puriform fluid.

Syphiloderma tuberculosum is usually a late manifestation, and is seen more frequently than any other eruption; occurring one, five, ten or twenty years after the initial lesion. The lesions vary in size from a small to a large pea, or are in the form of flat infiltrations, of a bright or usually dark-red, coppery, smoky hue; single, or more commonly multiple, disseminated or grouped, or arranged in circles, segments of circles or serpiginous tracts. The course is slow; they may, for a time, remain without undergoing any change; on the other hand, they may go on to ulceration or absorption. There are usually no subjective symptoms. When in the state of ulceration, papillary or cauliflower growths may spring up from the surface. The tubercular syphiloderm is to be diagnosticated from lupus vulgaris, cancer, and lepra, and the characteristic points to be remembered are the sharp, punched-out nature of the ulcer, its deeply infiltrated and raised border, and relatively rapid development.

Syphiloderma gummatosum, gumma or syphiloma, begins as a small, pea-sized, soft, elastic, colorless or pinkish subcutaneous tumor, growing slowly to the size of a hazel-nut or walnut. It has a tendency in time to break down and ulcerate with great destruction of tissue. Gummata rarely exist in numbers, usually but one or two occur, and most commonly in debilitated individuals, five or ten years after the initial lesion, though excep-

tionally as early as the first or second year of the disease. It is to be diagnosticated from simple abscess, furuncle, lymphatic gland, cancer, and fibrous and fatty tumor. It heals by absorption, or ulcerates and leaves an insignificant scar compared with the amount of ulceration.

Syphiloderma bullosum is a rare, late manifestation, consisting in the formation of blebs, which generally become puriform, and dry, and form large stratified crusts. Its presence indicates a greatly depressed state of the system.

Syphiloderma hæreditarium infantile.—The child may come into the world apparently healthy or with cutaneous manifestations, the former usually being the case. A month or six weeks after birth, lesions appear, attended with coryza and snuffles, consisting of erythema, maculo-papules, papules, blebs, or a mixture of these, generally occupying the thighs, buttocks, genitals, palms and soles, together with mucous patches. The bullous syphiloderm is, as a rule, present at birth, and consists of variously sized blebs, occurring most frequently about the hands and feet. These lesions soon rupture, and may give rise to ulceration.

The pathology of the syphilitic papule or tubercle shows it to be a neoplasm, composed of small, round, lymphoid cells, packed together, forming an infiltration resembling that of lupus vulgaris. The cell-deposit is most marked around and in the immediate neighborhood of the bloodvessels; it occupies more or less all the layers of skin below the horny layer, and is sharply circumscribed.

Respecting treatment, mercury and iodide of potassium are our most valuable remedies; and with them mainly the disease must be combated. They are ad-

ministered in varying doses and in various combinations. When used together they constitute what is known as the "mixed treatment." Mercury, when used alone, may be administered by the mouth, by hypodermatic injection or by inunction; in all cases salivation is to be avoided. The objections to the hypodermatic method, as introduced by Lewin, of Berlin, are that it is painful, and that patients generally object to its employment. Subcutaneous abscesses also often follow, and the procedure consumes too much time for the patient. The administration by the mouth is preferable to that by inunction, in that it avoids the staining of linen, takes up much less time, and, above all, in that the dose can be more accurately given. In the mixed treatment, the formula generally used is as follows:

℞.—Hydrargyri biniodidi, . . . gr. iss.
Potassii iodidi, ... ℥iij.
Syr. sars. co., ... f℥iv.—M.

Sig.—One teaspoonful, with water, thrice daily.

Local treatment of ulcerations may consist in the use of ointments of ammoniated mercury, one-half to one drachm to the ounce of lard; or ointment of the nitrate of mercury, one to two or four drachms to the ounce; or the oleate of mercury ointment, five to twenty per cent. strength. Mercurial ointment is also valuable, and is almost exclusively used in the hospitals of Vienna.

LEPRA.

Lepra, known also as leprosy and as elephantiasis græcorum, has of late received considerable attention in literature. The disease in our country occurs not only on the coast of California among the Chinese, but also in Louisiana and in Minnesota, and in other States. It may be defined as an endemic, chronic, malignant, constitutional disease characterized specially by disease of the cutaneous, nerve and bone structures, resulting in anæsthesia, ulceration, necrosis, general atrophy and deformity. Its invasion is usually slow and insidious, with premonitory symptoms of debility, nervous prostration, languor and the like. Persons sojourning in foreign countries for a time, as English soldiers in India, may thus contract the disease. Sooner or later blebs, macules, and pigmentary or tubercular lesions appear, together with nerve involvement and other symptoms.

Two forms of leprosy are recognized: tubercular and anæsthetic, which, however, may coexist.

Lepra tuberculosa is characterized by masses of infiltrations and tubercles preceded generally by an eruption of blebs, which are often the first manifestation. Macules then appear in the form of smooth, shining, erythematous patches, the condition being known as *lepra maculosa*. The lesions are of a yellowish or brownish color, present a brawny appearance, and usually involve the trunk and extensor surfaces of the extremities. The sensibility of the parts affected is markedly altered, there being first hyperæsthesia, then anæsthesia. The course of this variety is variable: sooner or later tubercles and prominent tumors begin to

appear, giving rise to *lepra tuberosa*. The lesions are seated in the skin and subcutaneous tissue, are of a brownish or bronzed color, situated, for the most part, about the face, producing a striking appearance known as *leontiasis*, the features becoming distorted, and the skin thickened, swollen and infiltrated. It may also attack the mucous membrane of the mouth, pharynx, epiglottis, and larynx. Ulceration occurs commonly about the fingers and toes.

Lepra anæsthetica may appear with the tubercular form or alone. Blebs followed by a pigmentary deposit often precede the anæsthesia. Hyperæsthesia may also precede it, attended with pain and burning sensations. The macular patches are generally anæsthetic, so much so that a pin may sometimes be thrust into them without giving rise to pain. The skin and also the deeper structures become atrophied, while the fingers and toes become crooked, bent and mutilated, the ends often dropping off, giving rise to *lepra mutilans*.

The causes are obscure. The disease generally exists endemically, especially in certain countries, as along the shores of the Mediterranean Sea, Atlantic and Indian Oceans, also in Asia Minor, India, China, and in some of the islands of the Pacific Ocean, especially the Sandwich Islands. It is also met with in Norway, Greece, Spain and Sicily; and in Mexico, Central America, West Indies, Brazil, and sporadically in the United States. A case is reported which occurred near New York, the patient never having been outside of his native county, and in which there was no evidence of hereditary taint. As to the contagiousness of the disease authorities stand divided, and strong evidence

is brought forward on both sides. It is probable that the disease is contagious in the sense in which syphilis is contagious. It is hereditary, being handed down from generation to generation. It is a distinctive disease, and has no relation with syphilis. The cause seems to be intimately connected with climate, soil, food, and habits of the people.

As to its pathology, it is a cellular deposit, like that in lupus and in syphilitic new formations, being most marked around the thickened bloodvessels. It involves the nerves, and thus gives rise to pain and anæsthesia. In the diagnosis it is to be distinguished from lupus, syphilis, scrofula, vitiligo, and morphœa. The premonitory symptoms and constitutional disturbance, together with the history of the case, and the deep-seated pain or anæsthesia, are usually sufficient to mark the disease and to prevent any error in diagnosis. As to treatment, hygiene, change of climate, and regulation of diet are of the utmost importance. Alteratives such as iodide of potassium, quinine, iodine, and cod-liver oil are useful, also gurgun oil, chaulmoogra oil, and Hoang-Nan, the last three being used by the natives, and being supposed by some to exert a good influence upon the disease. Locally baths of sulphur and inunctions with various oils, as gurgun and chaulmoogra, are highly recommended.

FRAMBŒSIA.

Frambœsia, also called yaws and pian, is an endemic disease of the West Indies, Fiji and other islands, South America, and the coast of Africa. The eruption is accompanied by constitutional febrile symptoms, and

is characterized by variously sized reddish papules and tubercles, resembling a strawberry or a currant, which soon ulcerate and break down.

PELLAGRA.

Pellagra, or Lombardian leprosy, is an endemic disease occurring mostly in the northern parts of Italy. The eruption, which is confined chiefly to those parts exposed to the sun, consists of a diffuse inflammatory redness ending in desquamation or the formation of vesicles and bullæ followed by crusts. The disease is accompanied by nervous prostration, melancholia, loss of mental power, and is said to be more common at certain times of the year. It is supposed by some to be caused by the ingestion of a certain ergot of rye or maize.

EPITHELIOMA.

Epithelioma, epithelial cancer, or cancroid, may manifest itself in one of three varieties—superficial, deep-seated or papillary.

The superficial, known also as the flat variety, usually makes its appearance as one or more yellowish or reddish papular elevations, often starting in a sebaceous gland or wart. Sooner or later it breaks down, oozes, discharging a watery or bloody secretion, and becomes crusted. An ulcer now forms, crusted, and with a variable amount of induration, which later becomes marked and sometimes ring-like around the sore, or later even distinctly everted. The lesion may at first be small, the size of a pea, and later develop to the size of a silver dollar. A chronic form of this

variety of cancer is known as *rodent ulcer*, occurring usually about the face, especially the upper half, more particularly the orbital region. It develops slowly, and may last from five to twenty years.

The deep-seated (known also as the infiltrating) variety generally begins as a firm, reddish tubercle in the skin, sometimes involving the subcutaneous tissue. It may start in a wart or nævus, and after a varying period of time, usually months, ulceration sets in. The lesion secretes a yellowish offensive fluid, its edges become infiltrated, and the whole process is attended with destruction of tissue, and frequently pain. The course of this variety of cancer may be slow or rapid.

The papillary variety occurs in the form of a papillary, warty, cauliflower-like growth, and often begins in a wart. The lesions, varying in size from a pea to a dollar, are raised, spongy, soft, dry or moist, crusted or covered with a viscid, sebaceous or bloody secretion. The common site of the disease is the face, especially about the mouth. It usually arises from an irritated point in the tissues, *e. g.*, excoriations from smoking a pipe, warts and nævi. It occurs more frequently in males than in females, and is most common after middle life, between the ages of fifty and sixty.

Pathologically, it is an epithelial proliferation of a malignant type, the malignancy being variable. The cell of the new formation is of the squamous epithelial type, and the excessive development of the rete mucosum downwards into the corium in the form of tubular prolongations, gives rise on section to the numerous epithelial nests or pearly bodies, which are characteristic. This epithelial proliferation is accompanied by a subacute inflammatory process by which the

tissue of the corium becomes the seat of a small round-cell infiltration, the whole being followed by subsequent degenerative changes. The disease begins in the normal squamous epithelium of the skin or mucous membrane. It is the least malignant variety of cancer.

Epithelioma must be differentiated from syphilitic tubercle and ulceration, lupus, and common wart. The development of syphilitic lesions is more rapid than cancer, and the secretion in the former is more profuse. The edges of the cancerous lesion are everted, and the surrounding tissue is more or less infiltrated, while in syphilis the induration ends abruptly. In the former there is also pain, which is, as a rule, absent in the latter. To distinguish epithelioma from simple wart, the age of the patient, the mode of growth and course of the disease are necessary to support the diagnosis. From lupus vulgaris it is diagnosticated by its attacking the middle-aged or elderly, by its appearance, and by its occurring generally as a single lesion. Lupus is a disease of childhood, and usually invades several parts of the body. The cancerous ulcer secretes a pale or bloody, viscid, often offensive fluid, while the secretion from the lupus ulcer is puriform and inoffensive.

The treatment of this disease consists in complete removal of the growth by means of the knife, curette, caustics or galvano-cautery, or in its destruction by electrolysis; one of these means is to be employed, according to the region, location, and size of the lesion. The superficial variety may in most cases be successfully treated by a thorough application of caustic potash, destroying not only the growth, but the bordering healthy tissue. The pain usually subsides imme-

diately after the application; if not, it can be relieved by bathing the part with dilute acetic acid. After cauterization some mild dressing, as of olive oil, may be used, and in a week or two the blackish eschar will fall off, leaving a granulating surface which, in favorable cases, soon heals over, leaving a scar. Other caustics, as arsenic with powdered acacia, equal parts, made in the form of a paste, or pyrogallic acid in the form of an ointment, one or two drachms to the ounce, are also useful in some cases. The treatment with the curette, or scraping-spoon, is of great value in the superficial variety, and should precede the use of caustics. In the deep-seated variety the most satisfactory treatment is that by the knife. It is also the best resort when repeated cauterizations have failed to arrest the development of the process. The prognosis should always be guarded, as relapses are common.

SARCOMA.

Sarcoma of the skin consists of pea- or bean-sized pigmented or non-pigmented, discrete, smooth, firm and elastic, reddish, violaceous or brownish tumors. The multiple pigmented variety generally occurs on the soles and backs of the feet, then upon the hands, the lesions being of a brownish, bluish or blackish color. It generally proves fatal, usually in a few years. The term *inflammatory fungoid neoplasm* has been used to express a rare form of sarcomatous disease, and occurs in variously sized, flat or oval, smooth or scaly, pale pinkish, reddish or violaceous, tubercular or fungoid tumors. The lesions may develop slowly or rapidly, the process running a variable course, tending to terminate fatally.

LYMPHANGIOMA.

Lymphangioma of the skin is characterized by multiple, pea-sized, brownish or yellowish, somewhat translucent, discrete, glistening, smooth, flat tumors, found mostly on the trunk. They grow paler on pressure, and do not seem to the touch to be sharply circumscribed.

NEUROMA.

Neuroma of the skin is characterized by various sized fibrous tubercles, containing new nerve elements, having their seat primarily in the corium, whose development is attended by violent paroxysmal pain.

MYOMA.

Myoma of the skin consists of tumors composed of smooth muscular fibres. They are of a pale rose or dull-red color, rounded or oval, pea- and bean-sized, slightly raised, solitary or multiple, and are not to be confounded with lymphangioma or with molluscum fibrosum.

CLASS VIII.

NEUROSES.

DERMATALGIA.

Dermatalgia is characterized by distinct localized neuralgic pain in the skin or by a morbidly sensitive

condition of the integument. The symptoms are varying, and the pain may be general or local—usually the latter—slight or severe. The affection is often associated with rheumatism, and may be symptomatic of organic disease of the central nervous system. The treatment depends upon the variety, whether symptomatic or idiopathic. In the former, the general condition demands attention; and in the latter, local application of the galvanic current, blisters and aconite plaster may be tried.

PRURITUS.

Pruritus is a functional cutaneous disorder, characterized by itching without structural change. The sensation is variously described as a feeling of irritation, formication or tingling. The disease is a common one, and may occur at any age. Occurring in elderly individuals, it constitutes so-called *pruritus senilis*. The itching, as a rule, is paroxysmal, and is worse at night. The disease may be universal or local, usually the latter, occurring frequently about the anus, scrotum and vulva, where it may be most distressing. The causes are varied; in children, pruritus ani may be caused by worms in the bowel; in females, it may occur in connection with gestation, irregular menstruation, hysteria, organic disorders of the uterus and ovaries. It may also be associated with diseases of the kidney, albuminuria, diabetes mellitus, hepatic diseases, jaundice, also with diseases of the nervous system and genito-urinary tract. Pathologically, it is a disease of purely functional character, usually the result of reflex nervous action.

The diagnosis offers no difficulty, as the surface of

the skin presents none but secondary lesions, produced by scratching or irritants. It may be confounded with pediculosis, but in the latter disease the secondary lesions are more extensive. With prurigo it has nothing in common except itching; in the former disease there is a distinct primary papular eruption. In the erythematous and papular varieties of eczema the primary lesions are usually characteristic. The disease demands both constitutional and local measures according to the cause, which should always be determined. The bowels should be regulated; if constipation exist, saline laxatives are indicated; if there be any dyspepsia, the diet must be regulated, and all indigestible articles of food prohibited. Where there is general debility, tonics, as quinine and strychnine, and belladonna may be prescribed; and where the kidneys are at fault, or the disease is secondary to jaundice, the alkalies may be used with advantage. Sulphur and its preparations, especially the hyposulphite of sodium, are sometimes useful. External treatment is always demanded. Hot water applications and alkaline baths and the tarry alkaline lotions are of service. Lotions are valuable containing carbolic acid and thymol, simple or as follows:

℞.—Acidi carbolici, ... ʒj.
Potassæ, ... ʒss.
Aquæ, ... fʒiv.—M.

Sig.—Use as a lotion, diluted with water.

One containing corrosive sublimate may also be given:

℞.—Hydrargyri bichloridi, . . . gr. viij.
Alcoholis, ... fʒiv.
Aquæ, ... fʒiijss.—M.

Sig.—Use as a lotion, diluted.

Essence of peppermint and glycerine, equal parts; dilute hydrocyanic acid, one to four drachms to the pint of water; and hyposulphite of sodium, one drachm to the ounce, may prove useful. Of the numerous formulæ, the following may also be mentioned:

℞.—Boracis, ... ℥ij.
Glycerinæ, ... f℥ss.
Spts. camphoræ, ... f℥j.
Aquæ rosæ, ... f℥vjss.—M.

Sig.—Lotion.

℞.—Fol. belladonnæ,
Fol. hyoscyami, . . . āā ℥ij.
Fol. aconiti, ... ℥ss.
Acidi acetici, ... f℥j.—M.

Sig.—Lotion, to be diluted with water, one drachm to the ounce.

℞.—Camphoræ,
Chloralis hydratis, . . . āā ℥j.
Ungt. aquæ rosæ, ... ℥j.
M. ft. ungt.

Sig.—Apply several times daily.

Pruritus hiemalis is a name employed to designate an irritable condition of the skin accompanied by itching and occurring during the winter months. The affection may occur in different degrees of severity and is usually most severe at night. As the spring approaches, the disease gradually disappears, but generally reappears the next autumn. It may attack any part of the body, although it is found most frequently upon the lower extremities. Where it has existed for some time, excoria-

tions may result from scratching. The treatment is palliative, and consists of vapor baths and the use of the various emollient ointments and lotions referred to.

Class IX.

PARASITES.

The diseases of the skin to which a parasitic origin is ascribed, are grouped together and form a well-known class. It is the only group of our classification that is based directly upon etiological facts. The effect of the development of parasitic organisms upon the human skin varies according to the nature of the parasite, whether vegetable or animal, the former thriving upon the superficial or epithelial elements of the skin, the latter upon the more vital and deeper structures. The vegetable parasites belong to the fungi, differing from the algæ in being devoid of chlorophyl and in being unable to assimilate inorganic matter. They are commonly known as "tineæ," and include several varieties, namely, *tinea favosa*, *tinea circinata*, *tinea tonsurans*, *tinea sycosis*, *tinea versicolor*. Parasitic diseases are most common in overcrowded communities, and are contagious in various degrees. They are local affections.

TINEA FAVOSA.

Tinea favosa is a contagious disease due to the vegetable parasite known as achorion Schönleinii, charac-

terized by discrete or confluent pea-sized, cup-shaped, yellowish, friable crusts, accompanied by itching. The symptoms are usually characteristic, among the most notable being the "favus cups." These consist of peculiar, circumscribed, circular, dry, pale-yellowish, umbilicated masses, which at first are firmly attached to the surface of the skin, but later become more or less detached. When taken between the fingers they may be crumbled. The color is generally modified by foreign matter. On detaching one of these cups, the skin beneath is smooth and shining, with a thin epidermal covering, and in a state of hyperæmia or inflamed and suppurating. The amount of crusting varies; when patches coalesce a honeycomb appearance is formed. The disease may attack any part of the body, but the scalp is the usual seat. When the itching is annoying, the patient, from scratching, may introduce the parasite beneath the nails, where it may develop, causing the nails to grow opaque, thick, and friable. A prominent symptom is the odor, which is that of mice or stale straw. Then again the hairs, when the disease affects the scalp, suffer characteristic changes, becoming dry, brittle, and losing their lustre. When the disease is neglected or persists for a time the hairs may become loose, fall out, and leave bald patches, which may be permanent.

It is a chronic affection, usually lasting years. It is due to the development of the vegetable fungus, the achorion Schönleinii. It does not develop on every individual with the same degree of readiness, but requires a peculiar condition of the skin. As a rule, it is a disease of the poorer classes, and is comparatively rare in this country. It is not infrequently met with in

some of the lower animals, as cats, rabbits, and mice, from which it may be communicated to man.

It is a local disease and usually affects the hair and follicle. The crusts are made up of fungus, consisting of mycelium and spores, also epidermal cells and débris. It may readily be seen with a microscope, and when attacking the nails may be detected in the scrapings. It is especially liable to be confounded with pustular eczema.

Occurring mostly upon the scalp, it is an obstinate disease. The hair should be clipped as short as possible; the crusts removed by means of oil or poultices; the loose hairs extracted, and one of the parasiticides applied. The following are effective: corrosive sublimate, two to three grains to the ounce; hyposulphite of sodium; sulphurous acid, and sulphur ointment. The following may also be recommended:

℞.—Ol. cadini, ... ℥ij.
Sulphuris sublimati, . . . ℥ij.
Adipis, ... ℥j.—M.
Sig.—Apply twice daily.

Time and persistent treatment are necessary to effect a cure; relapses are common.

TINEA CIRCINATA.

Tinea circinata, or ringworm of the general surface, is a contagious, vegetable parasitic disease, characterized by one or several circumscribed, circular, variously sized, reddish, inflammatory, slightly scaly patches, accompanied usually by itching. It begins as a small spot, and develops peripherally. When typical, the

patches are circular, later becoming annular. The lesions are only slightly elevated at the border. Usually only two or three patches exist. At times, vesicles, vesico-papules or even papules may form.

The disease is superficial, attacking the epidermis and affecting the lower layers secondarily. It is asymmetrical, and may invade any region, with preference for the face, neck, hands, and wrists. In adults it not infrequently attacks the thighs, groins, and axillæ.

The course of ringworm is variable, it being sometimes mild, then again obstinate. It may attack the nails, being then known as *tinea trichophytina unguium*, characterized by a whitish or yellowish, opaque, thickened, soft state of the nails. Tinea circinata is caused by the presence of the trichophyton fungus, and is highly contagious; all are, however, not equally susceptible to it. The scales, submitted to the microscope, reveal the fungus.

Local treatment alone is required in the majority of cases. Only in frequently relapsing cases is internal treatment, of a tonic nature, indicated. The most valuable parasiticides are the preparations of sulphur and mercury. The former may be used in the form of an ointment, as sublimed or precipitated sulphur, one to three drachms to the ounce, or in the form of a lotion of sulphurous acid. Ammoniated mercury, thirty to eighty grains to the ounce, and an ointment of the nitrate of mercury, are also useful. The following lotions are efficient:

℞.—Hydrargyri chloridi corrosivi, . . gr. iij.
Alcoholis,
Aquæ, ... āā ƒʒiv.—M.
Sig.—Apply twice or thrice daily.

℞.—Chrysarobini, ... ʒss.
Ol. cadini, ... ʒj.
Adipis, ... ʒj. —M.
Sig.—Apply twice daily.

℞.—Chrysarobini, ... ʒss.
Liq. gutta-perchæ, ... fʒj. —M.
Sig.—Apply with a brush.

TINEA TONSURANS.

Tinea tonsurans, or ringworm of the scalp, is a vegetable parasitic, contagious disease, characterized by one or more variously sized patches, on which the hair is diseased and broken off close to the scalp. It develops rapidly, the surface being the seat of variously sized scaly spots of a reddish, grayish or leaden color. The hairs lose their lustre, become harsh, dry and brittle. Later, they fall out, giving rise to bald patches. More or less itching is usually present. The disease tends to run a chronic course,—often years. *Tinea kerion* is a form of tinea tonsurans characterized by marked inflammation, suppuration, and the exudation of a yellowish, viscid product from the hair-follicles, and when fully developed the patches are œdematous and boggy.

Tinea tonsurans is a common disease of childhood, and occurs most frequently among the poor. It is caused by the trichophyton fungus, the same as in tinea circinata. The fungus invades the hair, hair-follicles, and epidermis, causing the hair to disintegrate, presenting a peculiar worm-eaten appearance. Under the microscope the hairs and the epidermis are seen to be permeated extensively by the fungus, spores predominating. The

bulb of the hair is usually the most invaded. The disease is to be distinguished from eczema, psoriasis, seborrhœa, alopecia areata, and tinea favosa.

The object of the treatment is the thorough destruction of the fungus, and for this purpose the remedies already indicated under the treatment of tinea circinata may be employed. Cleanliness is important. Patients should have their own special toilet articles. The loose hairs are to be extracted with forceps, after which the parasiticide is to be applied. The scalp, as a rule, in this affection stands strong remedies, especially where there is a tendency to chronicity.

In the form of lotions corrosive sublimate, two to five grains to the ounce of alcohol and water; carbolic acid one part to two of glycerine; sulphurous acid; and tincture of iodine, may all be recommended. The same may be used in form of ointments. The following may also be mentioned:

℞.—Ung. sulphuris,
Ung. picis, ... āā ℥iv.
Ol. olivæ, ... fℨj.—M.
Sig.—Apply.

Or.

℞.—Ung. sulphuris,
Ung. hydrargyri nitratis, . . āā℥iv.
Ol. olivæ, ... fℨj.—M.
Sig.—Apply.

In acute cases, glacial acetic acid and cantharidal collodion are useful. Where the disease is chronic, active treatment is always indicated, as by blistering with croton oil. The patches are painted with the oil

until the skin becomes inflamed and pustular. Poultices are then used, loose hairs extracted, and later sulphur ointment applied.

TINEA SYCOSIS.

Tinea sycosis, or barber's itch, is a contagious, vegetable parasitic disease of the hairy portion of the face and neck of the adult male, characterized by an affection of the hair and hair-follicles, and more or less inflammation, with the formation of pustular and tubercular lesions. The surface becomes red and scaly, as in ringworm, and assumes a deep-red or violaceous hue, and is studded with follicular pustules. The hairs are loose, dry and brittle. The lesions are discrete or confluent, and if not treated incline to run a chronic course. The subjective symptoms are itching and burning. The cause of this disease is also the trichophyton fungus, which invades the hair and hair-follicle. The disease is contagious, yet some individuals are more susceptible than others. It is for the most part contracted at the barber's. It occurs among all classes, and usually between the ages of twenty and forty. The fungus enters the hair-follicles and penetrates to the roots of the hairs, there setting up a perifollicular inflammation which is followed by infiltration, ending in suppuration. The infiltration of the subcutaneous connective tissue gives rise to the well-known tubercular lesions. Affected hairs examined microscopically appear more or less disintegrated, their structures containing fungus in abundance, mostly spores. The disease must be differentiated from sycosis non-parasitica, pustular eczema, and acne. As to treatment, both depilation

and the use of parasiticides are indicated. Crusts should be removed by inunctions of oils and washing. The hair should be shaved every third day, between which times all loose hairs may be extracted. Lotions of corrosive sublimate, two to four grains to the ounce, hyposulphite of sodium, one to two drachms to the ounce, and sulphurous acid, are usually well borne. The preparations of sulphur and mercury mentioned under tinea circinata are also useful. As a rule, tinea sycosis is not difficult to cure.

TINEA VERSICOLOR.

Tinea versicolor is a vegetable parasitic disease characterized by variously sized, irregularly shaped, dry, yellowish or light-brownish, slightly scaly patches, occurring mostly upon the trunk in adults. The affection begins in small yellowish spots, scattered over the chest or back; later they spread over large areas. Their outline is usually defined. The amount of scaling varies; it can always be detected by scraping the lesions with the finger-nail. They are of a furfuraceous or mealy character. The disease occurs, as a rule, upon the chest, sides of thorax, axillæ, and groins, and is irregularly distributed. The amount of itching varies. It may exist off and on for years, sometimes in spite of treatment. It is due to a vegetable fungus called *microsporon furfur*, and is only feebly contagious. It occurs in both sexes after puberty, and is frequently met with in patients suffering from wasting diseases. The fungus consists of spores and mycelium, and is always present in the epidermic scales, usually in large quantity.

The diagnosis is easy; in a doubtful case, a few scales

scraped from the lesions, treated with a drop of liquor potassæ, and examined with the microscope, will reveal the fungus. The treatment is usually satisfactory, and any of the milder parasiticides already referred to may be employed. A lotion of hyposulphite of sodium, a drachm to the ounce, is a good and safe remedy.

SCABIES.

Scabies is a contagious, animal parasitic disease, characterized by the formation of burrows, papules, vesicles, pustules, excoriations, crusts, accompanied by itching. As soon as the parasite reaches the skin it begins to burrow into the epidermis, laying its ova as it advances. These develop, and the young parasites also begin to burrow. The irritation gives rise to the formation of pin-head-sized papules, vesicles or pustules, the disease in two or three weeks becoming general, and affecting more or less the whole cutaneous surface. The itching becomes a marked symptom, the patient scratching and producing a variable amount of excoriation and crusting. The disease may generally be recognized by the multiformity of the lesions. The burrows are formed by the parasite entering into the epidermis and producing linear elevations from one to four lines in length. The regions attacked are the fingers, the flexor surfaces, folds of the axillæ, thighs, penis in the male, nipple and mamma in the female, and umbilicus and buttocks in both sexes. The itching is variable, and as a rule is worse at night.

Scabies is caused by the presence of the animal parasite sarcoptes scabiei. It attacks all persons indiscriminately, from infancy to old age, being communi-

cable by shaking hands or through the medium of bedding or clothing. In Europe, it is one of the commonest of all skin diseases, but in the United States it is comparatively rare. The itch mite is barely visible to the naked eye. As to the diagnosis, little need be said. Bearing in mind the multiformity and characteristic distribution of the lesions, evidences of contagion and the presence of burrows, there need be no difficulty. It must be distinguished from eczema. External treatment alone is necessary, and one of the best agents is sulphur.

℞.—Sulphuris sublimati, ... ℥ij.
Balsami Peruviani, ... ℥ss.
Adipis, ... ℥j.—M.
Sig.—Apply twice daily.

The above is to be applied freely over the entire cutaneous surface. The treatment should be kept up for several days.

Another formula is the following:

℞.—Sulphuris sublimati,
Styracis liquidi, . . . āā ℥ij.
Cretæ albæ, ... ℥ss.
Adipis, ... ℥j.—M.
Sig.—Apply.

Or,

℞.—Naphthol., ... ℥ss.
Adipis, ... ℥iij.
Saponis viridis, . . . ℥v.
Cretæ albæ, ... gr. xx.—M.
Sig.—Apply.

Other animal parasites attacking man, such as the *Leptus Americanus*, *Leptus irritans*, *Pulex penetrans*,

Filaria medinensis, *Œstrus* (or *Bot-fly*), *Demodex follicularum*, *Cysticercus cellulosæ*, develop in the skin and produce a variable amount of irritation. The last-named gives rise to variously sized tumors, and may be mistaken for molluscum epitheliale, sebaceous cyst, molluscum fibrosum, and lipoma.

PEDICULOSIS.

Pediculosis is a contagious animal parasitic affection, characterized by the presence of pediculi, which occasion peculiar lesions, scratch-marks, and excoriations, accompanied with itching. There are three varieties of the disease, called after the species of pediculi.

Pediculosis capitis, due to the presence of the pediculus capitis, or head-louse, is met with chiefly in children of the poorer classes, often in adults, and especially women. It occasions much irritation, which, if neglected, gives rise to excoriations, oozing of blood and serum, that become dry and form crusts and in time mat the hair. It may also give rise to an eczematous condition. Where pediculi exist, ova or nits may be detected on the hairs.

Pediculosis corporis is due to the pediculus corporis, or body-louse (also known as pediculus vestimentorum, or clothes-louse). The lesions are peculiar. The parasite, in drawing its nourishment from the skin, occasions minute lesions, marked by hemorrhagic puncta. The itching compels the patient to scratch, producing thereby linear excoriations followed by pigmentation. The parasite lives and develops in the clothes, usually in the seams, visiting the body to get its sustenance.

Pediculosis pubis is caused by the presence of the

pediculus pubis, or crab-louse, and occurs usually about the pubes, though occasionally in the axillæ, eyebrows, eyelashes, and beard of the male. The parasite is mostly found adhering to the skin, and the ova are on the hairs. The affection is most frequently contracted through sexual intercourse. The diagnosis of pediculosis should present no difficulty. In the scalp and about the pubes the presence of nits on the hairs is positive evidence, while on the general surface of the body the presence of pin-point hemorrhages, excoriations, multiform lesions, especially about the shoulders and hips, is sufficient. The clothing should always be examined.

In pediculosis of the scalp the main object should be the destruction of the parasites. An effectual method is that with petroleum. The head is well saturated with oil and a bandage applied, the dressing allowed to remain over night. Tincture of cocculus Indicus is also valuable. The nits are best removed by repeated washing with vinegar, dilute acetic acid, alcohol or alkaline lotions. In pediculosis of the body the first step is to remove all the clothes of the patient. They should be subjected to a sufficiently high temperature to destroy life. To afford temporary relief an ointment of powdered staphisagria, two drachms to the ounce of lard, may be freely applied to the skin. A lotion of carbolic acid is also useful. Pediculosis pubis may be successfully treated with simple mercurial ointment, white precipitate ointment, or a lotion of corrosive sublimate, one or two grains to the ounce.

The *Cimex lectularius*, or common bed-bug, *Pulex irritans*, or common flea, *Culex*, or mosquito, and *Ixodes*, or tick, may also attack the skin, producing erythematous, papular or urticarial lesions.

INDEX.

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

T

U

V

W

X

Y

Z